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NEW YORK STATE

AGRICULTURAL EXPERIMENT STATION

GENEVA, NEW YORK

URTANO

REGIONAL PLANT INTRODUCTION STATION

VEGETABLES AND ORNAMENTALS

VEGETABLES AND ORNAMENTALS

VEGETABLES AND ORNAMENTALS

DESCRIPTIVE NOTES

SEED AVAILABLE

1969 SEASON



### NEW YORK STATE AGRICULTURAL EXPERIMENT STATION REGIONAL PLANT INTRODUCTION GENEVA, NEW YORK

SEED AVAILABLE and DESCRIPTIVE NOTES

1969 Season

VEGETABLES and ORNAMENTALS

NORTHEASTERN REGIONAL PROJECT NE-9 14 Agricultural Experiment Stations

Cooperating with

NEW CROPS RESEARCH BRANCH AGRICULTURAL RESEARCH SERVICE U.S. DEPARTMENT OF AGRICULTURE

Released

1970

DESMOND D. DOLAN Coordinator, Regional Project NE-9

William R. Sherring Samuel W. Braverman
Asst. to Coordinator Research Plant Pathologist

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WHITE and Other Elifables

COUNDACTESS POSTONAL PROJECT : 12-9

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WENDERFOR RESEARCH BRANCH ACRECULTURE LOCAL COLLEGES OF ACRECULTURE

PROF

Successive State

Distributor, Fericasi Protect 1020

Servel W. Henverman Reserver Flore Intrologies "Hitem D. Sherring

### INTRODUCTION

Plant introductions herein listed are available from the Regional Plant Introduction Station, Geneva, New York. All were grown and increased during the past year. Notes were taken, as completely as possible, on horticultural characters and on disease and insect resistance. Ratings indicating resistance or tolerance do not imply that all plants in the row were uniform for this character. Photographs of many introductions may be borrowed from the Regional Station.

It is hoped that these notes may aid breeders in selecting plant materials for research projects.

Those receiving seeds may assist our program by reporting the merits and uses of plant introductions to the Regional Station.

Catalogs issued in 1954 through 1969 are on file with each Regional Representative and at each State University Library. Seed of all introductions previously listed are still available.

A similar catalog of forage legumes and grasses is sent in alternate years to all forage crop breeders.

### TOTTOUGHTEE

Plant Introductions herein listed are available from the Regional Plant Introduction Station. Galeya, East York. All were grown and increased dwing the past year. Notes were taken, as completely as possible, on horticultural characters and on disease and insect resistance states and on the restatement fatther restatement or tolerance do not imply that all plants in the row were uniform for this character. Photographs of many introductions may be horrowed from the Postoreal Station.

It is noped that these notes may aid breeders to relating plant, materials for research projects.

Those receiving speck may assist our program by reporting the morning and uses of plant introductions to the Regional Station.

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### ALLIUM CEPA

# 1969 Descriptions and Evaluations

Seeds treated with Arasan 75. Seeded in bands in flats, 90 seeds/accession 2/25/69. Set in field 5/13/69, 30 sets per accession. Spacing  $4^{\prime}$  x 3.5" +  $4^{\prime}$ . Fertilizer 640 lb. 10-20-20/A. Notes taken 8/11-12/69.

1=poor 1=poor		1=least		l=very late			o=oval	y=yellow w=white	l=few		f=fine
5=medium 5=medium		5-medium		5=medium			f=flat	d=dark y=y	5-medium		m=medium
9=very uniform 9=most	thes r plant	9=heavy	eaves	9=very early	10 & 11 Neck length and diameter in centimeters	12 & 13 Bulb depth and diameter in centimeters	g=globe	r=red br=brown	9=many	imeters	C=COarse
Uniformity: Vigor	Plant height in inches Number of leaves per plant	Amount of bloom	Number of broken leaves	Maturity	& 11 Neck length an	& 13 Bulb depth and	Bulb shape	Bulb color	No. Loose Scales	Root length in centimeters	Root size:
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Bulb		Shp.		ರು	5.0	)	50	b	۵	VO		50		OV		ΛO	necks	OV		<b>&gt;</b> >		50	තු		OV	50	60			the ba	50		₩	
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		Dpth.		8.7	6.5		5.5	11/69.	1b.	4.2	•	5.5		5.5		5.2	several	4.9		5.1		6.5	4.5		5.3	5.1	5.3		9/9	- narrow	5.4		7.0	
	Neck	x Dia.	cepa	2.0	1.9		0,0	$\infty$	one white bulb.	1.0	multiplier	1:9		1.9		2.3		1.5		2.2		1.3	1.6		1.6	2.7	1.7		2.1	a top	1.9		2.3	
	Ne	Lth.	Allium	5.5	9.0	,	6.1	broken necks	one wh	10.3	9; mult	0.9	ers.	0.9		6.5	seed 8/1	6.5		ω m		0.9	5.5		4.1	3.0	1.9		4.0	like	5.5		2.7	
	ue	Mat.		0	_			with bro 7	/11/69:	4	8/11/69;	9	8/11/69; some multipliers	ω		9	set se	_		<b>ι</b> Λ		7	2		7	9	2		8	shaped	9		_	
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		P.I.No.		120677	121292		121829	124070		124525		125784		140138		140321		140331	,	163172	;	164361	164389	,	164676	164850	165498		168960		168965	,	168967	

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	Orig.	Tur.	3 broke	2 broken	Tur.	2 broken necks.	10 broken necks.	Tur.	One pla	Tur.	Tur. 7 9 30 12	2 bolted:	Tur.	4 plants;	Tur.	20 broken necks; one multiplier.	Tur.	12 broken necks;	India	2 broken necks.	Tur.	16 broken necks;	India	2 plants.	Tur.	16 broken necks.	Afgh.	19 broken necks.	Afgh.	( plants	9 broken
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		Mat.	$\infty$		9		5		9		_		cult.	$\infty$	very	_	om 8,			Σ,	neck
#	Broken	Lvs.	7		$\sim$		2		7		7		Standard cultivars included for	2	necks;	<u></u>	in bloom 8/12/69	<u>.</u>	ecks.	$\infty$	proken necks.
	Lvs./ Amt.	Blm.	2		3-7		2		5-7		2		St	4	roken	m	s; one	ابر ا	oken n	<u></u>	11. 60
	Lvs./	P1t.	$\infty$	ed.	7	Lted.	ω	KS.	15	iks.	6			<u>_</u>	16 b	6	neck	0 (	IV Dr	10	TURID
		P.I.No. Orig. Unif. Vig. Ht. Plt.	Afgh. 4 5-9 24 8	3 broken necks; 1 bolted.	3-6 16	cks; 1 bol	6 19	broken nec	5-8 22	broken nec	294456 Gr.Brit. 6 4-8 20 9	к.		Harris 6 9 21 7 4 7 8 4.6 2.3 8.2	ow Globe.	Harris 6 8 22 9	21 broken	Harris 7 9 23 9 5 7	a blobe.	Marris 8 9 24 10 7	at of bits
		Unif.	7	ten nec	<b>#</b>	oken ne	9	its; 2	4	ed; 8	t. 6	1 broken neck.		9	g Yell	9,	Tobe.		or alo	Dowt 112	101040
		Orig.	Afgh.	3 brok	Afgh.	10 bro	ran	5 plan	Iran	4 bolt	Gr.Bri	1 brok			Downin	Harris	n BOTH	Harris	diranac	Marris	20 711
		P. I. No.	211575		212587		223327 I		292163		294456			G-18542	1	G-18543	7.170	C+-T0>4>	1,170 1.1.	44COT-5	

# APIUM GRAVEOLENS var. RAPACEUM

Seeds treated with Arasan 75. Seeded in greenhouse 3/6/69, 60 seeds per accession. Pricked off 4/1/69, 20 plants/accession. Set in field 5/15/69. Block No. IV. Spacing 4' x 1' + 4'. Fertilizer 640 lb. 10-20-20/A.

Col. Col.	•	Col.	Col.	Col. 9	Col.	Col.	Col.	Col.	Coo.	Col.
16	14	12	0.1	9	00	7	0	S	4	u
Col. 15 Leafiness 9=very leafy Col. 16 Leaf color m-dk=medium-dark green Col. 17 Keeping Quality 9=excellent	Color of petioles m=medium green pr=purple 1 gn = light green Petiole hollow or solid	Number of split petioles	Petiole diameter in centimeters	Petiole length in inches	Crown width in inches	Width of plant in inches	Height of plant in inches	Vigor 9=most	Habit 9=very erect	3 uniformity y=very
5=medium gy-gray 5=medium	1 pr=purple 1 gn =							5=medium	5=medium	>=med1um
l=sparsely foliated gn=green lt=light l=poor	light green d or dk=dark							1=least	1=prostrate	1=Least

171499	169001	169000	168996	168995	164944			320996		320995		320994		289691		285546	234597		234596		229526	226624		223333		222702	196831	175591	P.I.No.		
Tur.	Tur.	Tur.	Tur.	Tur.	Tur.		Huang I	Taiwan	Huang I	Taiwan	'Hainan	Taiwan	'South	Austral.	'Jablkowy'	Pol.	N. Zeal.	'South Australian White	Austral	Resembles	Iran	Iran	Resembles	Iran	Resembles	Iran	Resembles Ethio.	Tur.	Orig.		
V1 0	\-7	00	7	01	7		Hsin M	0	Hsinlate'	7	Sev	9	Austra	. 7		00		Austra	. 7		7	7		7		ω			Unit.		
T-6	2-5	2-5	1-6	1-6	2-6		Medium E	1-8		1-8	Seven plants	1-7	Australian White	1-6	Resembles	1-7	4-7	lian Wh	4-7	celeriac.	1-5	1-6	celeriac.	1-7	celeriac.	1-7	celeriac.	1-5	нар.	e e	
00 0	o co	) ()	7	7	00		Early'	7	Resembles	7	9	7	ite	00		7	00	ite	7		7	7		00		7	7	9	V18.		
19	15	16	29	16	16	Apium	All	37		29	all plants	ω <u>μ</u>		18	celeriac.	13	14		16.5		17	16		19.5		17	16		Ht.		
33	2 22	22	μ	29	32	m gre	plants	19	celeriac,	21		24		29		20	23		28		26	26		33		24	23	28	Wtn.		
20 00	1 57	2.5	2.5	P.5	10	graveolens	in	۳	all	1.5	in flower,	w		2.5		N	2.5		3.25		2.5	ω. 5		Ψ		2.5	3.25:	Apium e	Wth.	Crown	
22	17	17	22	17	19	var.	flower,	38	plants	29		31		19		14.5	15		17.5		19.5	17.5		20		. 17	17	graveolens 17.25 1.	(in.)	Lgth.	
0.9	1.0	1.2	1.2	    	1.2	rapaceum	resembles	1.0	in fl	1.0	resembles	.9		1.2		1.0	1.5		1.2		.7	00		.9		.9	<b>⊢</b>	ens 1.0	(cm)		
00 00	9	00	00	9	00	mu		4-7	flower.	5-7		7		7		6	$\infty$		00		0	5-7		5-7		5	00	7	No.		Pet
<b></b>			Ħ	d T			celeriac.	ш		faul	celeriac.	٣		سا		<b>-</b>	<b> </b> -		<b></b> -		<b>⊢</b>			- <u> -</u> - -		H	⊢	H	Split	No.	Petiole
n Lt-m	m-dk	m	n-dk	% rd	H		iac.	lt-m		lt-m	•	1t-m		m-dk		pr&d gn	dk		m		r&m gn	TE		pr&l gn		r&m gn	田	耳	Color		
hollow	hollow	hollow	hollow	hollow	hollow			hollow		hollow		hollow		solid		hollow	solid		solid		pr&m gn hollow	solid		gn hollow		pr&m gn hollow	solid	hollow	Solid	Hollow	
99	00	7	00	9	Φ			5		7		0		7		6	9		7		3-7	7		3-7		4-7	7	Φ	Lfy.		
m It-m	m-dk	1t-dk	m-dk	lt-m	ltdk			lt-m		lt-m		lt-m		m-dk		d gy-gn	m-dk		m-dk		m gy-gn	田		1 gy-gn		m gy-gn 5	lt-m	m-dk	Color		
70	ο 00	, Φ	φ	0)	7									S		5	<b>V</b>		Si		7	7		0	,	5	5	6	Qual.	Keep.	

	G-19150	G-19093	G-19092		201100	7561756	261001		257228	254539			181714	179171	176417	172725	Apium	P.I.No.	
Alabaster.			N.Y.		Six pla	Four p	Tur.	All ex	Thai.	Iraq	Variation in		Tur.	Tur.	Seven plants Tur. 6	Tur.	Apium graveolens var.	Orig.	
	7 00	green light (non-chlorotic) 9 2-5 8 13	Φ		Six plants are	Four plants in row have lt-m leaves	5	All except one are in flower (8-5-69)	0	5			0	7	plants 6	4	ns var.	Unif.	
Apium graveolens var. rapaceum	Apium 2-7	ht (non-chlorotics) 2-5 8 13	3-7			row ha	1-6	are in	1-7	1-7	plants -		1-6	1-8	1-7	1-5	rapaceum (cont.)	Hab.	
veole	6 grav	8	0	Stand	wer.	ive It	4-7	flow	7	5-8			5-8	7	7	5	m (cc	Vig.	
ns va	18	rotic 13	14	ard c	C	-m 16	4-7 16	er (8	29	20	particularly		16	16	17	16	nt.)	Ht.	
r. re	ns. 24	$\sim$	25	ultiv	t		29	3-5-69	22				30	28	28	31		Ht. Wth.	
paceum	N	Apium graveolens 3 14	3.5	Standard cultivars included for comparison	U	and appear	2.5	٣	1.5		size, le		ω 5	F-5	2.5	4		Wth.	
1	18	14	16	luded	<u> </u>	ear d	17		28	21	af si		19	18.5	19	17		(in.)	1 1 1 1
	0.8	1.5	1.2	for co	0.9	different; also	0.8		0.9	0.8	leaf size, and	1.0	0.5-	1.2	1.0	0.7		(cm)	1
	0	9	00	mpari	- 9	ວ ຄື ຊ••	9		+	$\infty$	petioles.		9	7-9	$\infty$	4-7		No. S	Petiole
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m-dk gn	ård	m-dk	lt-m		Ħ	smaller	% ard		n-dk	%rd	•		lt m	m-dk gn	gn gn	pr&l-m		Split Color Solid	
	hollow	solid	solid		mottow o		hollow		hollow	hollow		& solid	hollow	n hollow 8	hollow	pr&l-m hollow		Solid	רר-זו
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## BRASSICA OLERACEA V. BOTRYTIS (broccoli & cauliflower)

Seeds treated with Arasan 75. Seeded in greenhouse 4/4, 96 seeds per accession. Pricked off 4/21&23. Set in field 5/22, 16 plants per accession. Spacing 4'xl 1/2'+6'. Two replications. Fertilizer 6401b. 10/20/20/A.

Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.
0	17	16	15	14	13	12	11	10	9	00	7	6	5	4	ω
18 Flee beetle	Cabbage worm injury)	Number of plants bolting	15 Date edible	Curd color:	Curd compactness: 9=very	Curd depth and diameter in inches	Number of heads	Maturity:	Amount of bloom:	Leaf color:	Leaf size - Height	Plant size - Heigh	Vigor:	Habit:	Uniformity:
) <del>y-</del> much	y) O-mich	olting		cr=cream	9=very	neter in inches		9=earliest	9=much	1=light green	Leaf size - Height and width in inches	Plant size - Height and width in inches	9=most	9=very erect	9=very
)-moder and	7			w=white	5=medium			5=medium	5=medium	m-medium green			5=medium	5=medium	5=medium
T-STTETL	1=c1; ah+			y=yellow	l=loose			1=very late	l=little	d=dark green			l=least	1=prostrate	1=least

244831	241617	234599	231048	225852		212592	209758	209753		208481	208479	208),78	208476	208475		208474		205990	204777		204770	183214		181719	173845		165488	189028	P.I. No.			
Eng.	Completely Austral. 6	Austral.	Afgh.			Afgh.	Neth.	Neth.	One plant	Neth.	Neth.	one plant	Neth.	Neth.	one dead	Neth.	3 1	Swe.	Hr.	No heads	Fr.	India	4 plants;	3 plants India		all have	(broccoli India	P. Rico	Orig.			
6	6 Ly	00	7		heads a	0	00	$\omega$		7	0,-			7 1.				Ф	ω.		ω,	_		. 8 TTB s	0		li)	.0	Unif.			
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7	0	9	œ			ထ	8	9	ff	φ.	-7 -	1	9	ထ		9		00	ထ		<i>ا</i> و	9	7			/24/69	7	9	Vig.			
	heads		29	19	: som	32		23	nt	19				18		16		22					9			9	30	32	Ht.xWth.	Plant		
ω ω	3 7/28 28	38	11	39	some have	38	38	39	than	38	ę, r	) )	42	42		36	,	39	39		22	39	(	43			ω <sub>1</sub>	31		nt		
18	169	20	28	42	bol	24	21	21	he	18	18	7	22	23		15	1	2	21		28	23		20	17		15	13 B	Lgth.			
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7/23	7/21		7/29	7/18	;	7/12				7/18	7/18	2	7/28	7/20		7/22		1	7/27		- / - +	7/21							Edible	Date		
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G-19086	G-19087	G-19085	G-19090	G-19091			321001	321000	320999	320998	320997	271320	B. oler. P.I. No.	
(O	H-333 'Early Purple Head' Harris 7 ;-5 8 22 37 24 H-342 'Snowhall Y'	s 5 1-5 6 25 42	H234 (broccoli) 1-5 8 25 39	3-6 8 20 30	Standa	All plants have bolted 7/28/69.	Taiwan 6 1-5 7 26 34 15	No heads have formed (/20/09.  Taiwan 7 1-6 7 28 30 14	All plants have bolted; pods have formed 7/28/69. Taiwan 9 1-4 8 21 37 18 9 m gn	Taiwan	Taiwan	India 6 1-6 7 31 33 17	B. oler. v. bot. con't. Plant P.I. No. Orig. Unif. Hab. Vig. Ht.xWth. Lgth	
10 m gn	11 m	21 10 d gn	One plant dead; all have bolted 7/24/69.  10 8 d gn 8 8 2 6 8	8 dgn	Standard cultivars included for comparison		ll m gn	7 m gn	rmed 7/28/69 9 m gn		med 7/28/60	10 m gn	Leaves Lgth.xWth. Col.	
6 2	6 5	8 9	all have 8 8	7	included		Vī	6	က	•		ω	Blm. Mat.	
14	6	<b>5</b> 1	bolted 2	0	for co		0	0				0	No.	
\f	5	00	9/42/1.1		mpariso								Curd Dpth.xDiam. Comp. Col.	
00	9	9	Φ,	1	Ħ								Curd	
7	00	7	9										Comp.	
cr	cr	p <b>r</b>	d gn				cr.						Col.	
7/28	7/24	7/16	7/18										Date No. Worm Edible Bolt. Inj.	
0	0	+	7	15			16	16				15	No. Bolt	
9	00	9	5	6			9	7	9	9+	7	6	Worm Inj.	
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### CUCURBITA

Seeds treated with Arasan 75. Seeded in gh 5/14, 3 seeds/pot-8 pots/accession. Thinned to 2 plants/pot, set in field 6/5, 16 plants/accession (2 plants/hill). Spacing 12'x3'+9'. Fertilizer 640 lb. 10-20-20/A. Notes taken 9/2/69.

Col.	Co1.	Col.	Col.	Col.		Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.
19	18	17	16	75		14	13	12	1	10	9	$\infty$	7	0	তা	F	ω
Mosaic ) Powdery mildew)	Color of flesh:	Depth of flesh in	Fruit spotting:	Fruit ribbing:		Fruit color:	Fruit length and d	Set:	Maturity:	Date of first poll	Leaf color:	Leaf size:	Number of leaves:	x width of	Vigor:	Habit:	Uniformity:
9=severe	y or yel = yellow o or o	cm.	9=much	9=much	1=light	gy=grey gn=green	diameter	9=very prolific	9=very early	pollination	d=dark	s=small	9=many	vine length of plant	9=much	b=bush	9=very uniform
5=moderate	o or or = orange l= light		5-moderate	5=moderate	d=dark	w=white or=orange		5-moderate	5=medium		m=medium	m=medium	5-moderate		5=medium	v=vining	5=medium
l=slight	d = dark v = very		1=little	1=little	m=medium	ange t=tan		1=very poor	1=very late		l=light	l=large	l=few		1=poor		l=least uniform

	312165	312125		302417	287532		277405	245142	234612		234253	230180	227361		220861		512009		211997	211990		183259	171615	169440	P.I.no.	
Calabasa	Mex.	Guat. 7 Extremely	Sure looks	Round Neopol. N. Dak. 8	Ht.	Basic col.	Afgh.	Tur.	Afr. 7 Skin rough	and un	Jap.	Tur.		4	Kor.		Iran	Some f	Iran 6	Iran	Basic	Arabia	Tur.	Tur.	Orig.	
			ks	Neopol			5 green	w	7	0,7	. 9 80 9	0		are 1/	S Trout	ന		ct		ı	col. n	4	0	7	Unif.	
Lechonga'		late.	like M	⋖	4	light fruit	greentsn grey	4	v 5	, C.	Z not	4	۷,	1/2 pink pears and	4 6 5	orange and	4	basically	Tight g	4	medium grey,	4	∢	4	Hab.	
		Does n	Meaders	Label C.	000	or., s	d 6	ω	5 5 1 at e		$-\infty$	8	7	k pear			, 5		grey, c	Sī	grey,	0	0	7	Vig.	
Possible		not set		mas.	10	striped	grey.	ω	netwo	i 2 1	1. O	.51			2 5	ridged,	i cu	grey but	ne-haJ	4		5	5	J	Lgth.xHt	Vine
	040	50	Orange Buttercup.	Really	38	∢.	43	- t	5 50	r Agre	6 45	64		1/2 gr	70	- C	252		one-half fruits	040	spotted or.	94	45	52	xHt.	0
tolerance t	S	m	ercup		西西	pale ora	res and		S S		ξΩ	H		grey flat	<b>}</b> ⊷↓	ridges ]	ູ້	have small	its are	Ħ	Some	田田	m	田田	No. Sz.	Leaf
to p.m.	മ	വ	Fruit	C. moschata.	₽.	orange and	d 7.		d		S D B D D D D D D D D D D D D D D D D D	田		at globes.	വ	per in		orange	m	Ħ	fruit	日日	മ	d	Col.	Th.
. Very			it have	-7	730	nd spotted	7-18	7	7-17 !	Tratto " Of and	7-15	7-8	L		7-9	Trunt.	_,E	Ŋ			solid	7-18	7-13	Cucurbita 7-11	Pol.	Date
/ late,	þel	٢	a bulge	Most of -2 9+	ω	ted a	C	- 4	5	Stem 10	5 6	. 9	6	ome	8-9	very s	O	•	9	'	0	5		E	Mat	
no	0	0		leaves 8	TT.		8		0	₩ ₩	9+ 2	0	ω	orange	7	small			orange.	6	(T)	6	+	ma 5	Set	
set at Geneva.	18		or protuberance at blossom end.	es and	30	conspicious	30		H		0	28	23	-	ယ္ထ	yellow	7.72	) }	ω	31		24	22	36	Lgth.	
Genev	12		uberan	petic 20	30	gre	34 l or	25	31	7.1	17 nec	35	24	Vari	50	spot.	, 16		40	30		38	37	44	Lgth.xDiam.	Fruit
			ice at	petioles killed 20 or 0	d gn		l or	gn-gy	w, gy	7,100	15 o red 0	gy	gy-gn	Variable.	p,gy,o		R		1 gy	1 gy		m gy	1 gy	97	Col	ıit
ruit e			bloss	illed 0	T.	owdery	0-2	0-1	0-1	ייני הייני		N	0-1		0 1-4	rt nav	: , c	)	N	N		N	۳		Rib.	
Fruit egg-shaped.			om end	by p.m.	1 gn	milde	gn	gy	0	. Odbita	ر در در در در در در در در در در در در در	or	p gn		0-I	e a m	ধ		TO	TO		or			Spot.	
aped.	1.5			2.9	7	Powdery mildew came	5	4.5	6			4	<del> </del> 1		ω, σ	Fruit have a mottled			ω. <sub>5</sub>	4		N	ω 5	5.0	Flesh	Depth of
	y-0		Very pale	1 or	or	e late	y-or	Or	or	(± 3/ Ci )	Or 0	or	or		or	orange			1 or	or		y0	TO	y-0	Flesh	Color
	0	<b> </b> -	e orange	0	N	and d	0	5	ω	T 0 0 0 10	0	0	7		w	VS	V		0	1-2		<u> </u>	0-1	<del> </del>	Mos	
	8	0	ge	7	9+	did	7	9	5	(	3-4	N	4		N	yellow.	, 6		0	1-2		ω		2	Mild.	Powd.

	318432	318431	318430	318429	318428	318427	318426	318425	318424	318423	318422	318421	318420	318419	318418	318417	Cucurbita P.I.No. 317893
Female flws. open first, no males. Note 7/2/69. Greyish green stripes.	7-4 9 7 22 23 d gn 0-1	1, grey stripes, ridges of corky callus. 3.0-3.5 42 m m-d 7-4 9 8 23 28 d gn 0-1	Fruit rough and bumpy. Flat globe, very attractive.  Minn. 8 v 5 4 40 m m 7-3 9 7 10 17 d gn 1-2	Fruit reddish orange cone. Sunken at stem end. Excellent set, very attractive. Resembles 0 Minn. 8 v 9 2.5-3.065 d d 7-5 9 9 18 28 red-or 2-3	f runner. Pale orange stripes. Recessive gene for yellow petiole. 8 v 9 3.5-4.0 50 m d 7-4 9 8 28 26 red-or 1-3	Pale orange stripes. Raised areas of corky callus. Recessive gene for yellow petiole. Minn. 7 b 6 1.0-1.565 m m 7-14 5 6 14 19 or 2	Raised areas of corky callus. Recessive gene for yellow petiole.  1.5-2.0 72 m m 7-20 3 7 13 21 or 0	green area at blossom end.  1-m m 7-15 5 8 15 22 or 0-1	n stripes. Recessive gene for yellow petiole.  1.5 62 m m 7-8 8 7 11 20 or 2	for yellow petiole.  19 or 2	Narrow faint grey stripe. Fruit dk. green. Very much like Table Qu 1.0-1.5 75 1 m 7-20 4 7 13 24 or 0	Pale orange stripes. Blossom end is green.  1.5-2.5 82 1 m 7-5 9 9 11 18 d gn 0-1	Minn. 9 b 9 1-1.585 1 m 7-13 6 9 14 22 or 0-1	recessive gene for yellowish petiole. Two plants off-type.  1-1.5 75  1 m 7013 6 9 13 19 or 0-1	bush plants. 0 m m 7-11 7 8 7 15 d gn 0-1 0	from disease. 7-15 6 9+ 12 20 red-or 0-1 have a green area at blossom end and very pale	Orig. Unif. Hab. Vig. Lgth.xHt. No. Sz. Col. Pol. Mat. Set Lgth.xDiam. Col. Rib. Spot.
	2.8	2.2	1.	olden	3.6	2.5	2.5	2.4	2.6	W H		2.6	3.9		2.0	3.1 orange	Depth C of Flesh F
	1 or	d or	d or	Golden Delicious. 3.4 y-0 0	d or	lor	1 or	or	or	or	Or	or	lor yellow	lor	d or	or	Color of Flesh
	0	0	0	ous.	0	0	0	0	0	0	0	0			0		Mos.
ίΙ.q	7-8	3-4	<b>∪</b> i	Vi	5-6	Vī	6	6	6	00	7-8	7	9-6	3-4	0	6 Ex-	Powd. Mild.

	hata.	l or	4.5 1 or tely C. mos	Teaves and terminals still ok.  It. 4 v 8 6 38 m d 7-28 3 4 63 27 d gn 5 4.5 l or 2 colong. Definitely C. moschata colong. Definitely C. moschata	· 5	27 d gn 5	27	63 ong ov	4 ape lo	3 lit sh	m d 7-28 3 l from p.m. Fruit	d p.m	m ad fro	s. de	ok. 38 der lv	10 TTV	la' .	rerm v pagno	dzza s		G-18995
	0 Jounger	or	5.3 from p	Calif. 5 v 8 6-7 64 m d 7-25 3 5 40 31 dgn 8 5.3 or 0 Wh. Atr' Really C. mos. Fruit dark green, stippled light green. All of older lvs. dead from p.m., younger	S lvs.	31 d gn 8 of older lv	31 1 of	40 A1	5 greer	3 light	7-25 ppled	d sti	greer	dark	Calif. 5 v 8 6-7 64 m d 7-25 3 'Wh. Atr' Really C. mos. Fruit dark green, stippled lig	mos.	8 ly C.	Real	Atr'		G-18664
10	1-2	1 or	3.7		0	r or	30	32	-7	9 share	7-5	t siz	· m	Lidew ble i	Plants all killed with powdery mildew.  N.Y. $\psi$ $\nabla$ 9 $\psi$ -5 56 m m $\pi$ 7-5 9	tive.	ttrac.	A A STATE	A TTE SO	3 N.Y.	NK 530F3 N.Y. 4 v 9 4-5 56 m m
		or	5	•	t areas.	us p	288	31 28 d gn	CV a.L		THORCITE	nape		1	USA 5 v 3 2	2 2 2	reall.	w.,	5	USA	326320
	ω				6	3	29	38 29 d gn	very actractive. 2 38 29		etlole	d wor	m yeı	ene io	Pale green stripes. Recessive gene for yethow perhotes.  Mex. 5 v 8 5 67 m d 3	heces 5	pes. 8	A	green 5	Mex.	326183A
	0	1 or	2.8		ω	d gn	18 d gn	11	9+		m m 7-19 4	m	Tin .		N. Dak. 8 b 9+ 1.0 85	, T	9	. 0	r ®	N. Dak	318433
Powd	Mos. Mild.	Color of Flesh	Depth Color of of Flesh Flesh	Spot	Rib.	it Col.	Fruit	Fruit Lgth.xDiam. Col.	Set		Date Pol. Mat.		Leaf No. Sz. Col.	No	orig. Unif. Hab. Vig. Lgth.xHt.		b. Vi	Ha	Uni	ta con'	Cucurbita con't. P.I.No. Orig.

	G-1		G-1		G-1		G-1	
	.9203		8178		.7933		G-17931	
Cornell. 176959 Y Yank. Lyb. F7 Fruit oblong, lt. tan, 20 ribs, rough and bumpy. Good field tolerance to p.m. Only 2 out of 8 plants showed mosaic.	W.Y.	Really	Jap.	'Courg	Eng.	Little	Eng. 9 v 7 2	
only a	$\infty$	C. mo	00	ette i	+	e Gem	0	
76959 out	∢	es.	4	2 of	hr	Hun	∢	
Y Yank of 8 pl	9	ruit m	7	f-type	0	'Little Gem' Hundreds of fruit look oranges. Approx. 18 fruits per plant.	7	
Lyb.	N	ich ri	S	plant	1.5	of fru	N	
F7 F	53	bbed t	84	s with	50	it loc		
ruit o	田	urban	ಬ	short	M	k oran	co	
blong,	Ħ	or v.	Qı	block	Ħ	. S D 00	TI CI	15
It. to	7-7	flat g	7-27	y fruit	7-3	Approx	7-2 9 9	curbite
an, 20	ω,	lobe,	w	t. 1	9	. 18	9	g pep
) rib:	9	lt. t	0	rais	7	fruits	9+	ļO
s, rou	20	an.	H	sed ri	38	per	00	
gh and	اسا اسا	Defini	22	dges I	14	plant.	8 7.5 or	
dump 1	It t	tely	It t	er fr	d gn		TO	
y. Goo	7	C. mos.	00	uit.	0		0	
d fiel	ب	'Kabo	w		2		۲	
d tol	ů	cha i	.0		·		1.1 W	
erance	1.3 1 yel 2-3 0		v 1 o		1 yel		W	
t o	2-3		0		4			
	0		7		00			

H774 Harris 7 v 6 3 25 s d 4 8 21 11 t 0 4 or 0 5  G-19082 Harris 8 v 6 2.5 42 m m 7 6 15 13 d gn 9 0 2.7 d or 9 9  G-19084 Harris 9 v 4 50 m m 7 20 25 d gn 1-2  G-15497 Harris 8 v 7 3 m m 9 7 12 17 or 3  G-15497 Small Sugar H695. Fruit flat globe. 20 ribs per fruit. Vines and lvs. all dead due to p.m. 9/4/69.	
Table Que  Del. H780  Small Su	
9 : 0 -	
6 3 ut. Some from 6 2.5 ueen H820. 4 80. Fruit 1 7 3 7 3 Sugar H695.	
3 25 le fruit striped 2.5 42 20. 3/4 of row 4 50 uit rough. 3 3 95. Fruit flat	Stanc
s d ped green a m m row dead fr m m m	lard cultive
t stem end. 7 om disease. 9 20 ribs pe	Standard cultivars included for comparison
8 Pr	for
21 15 20 20 12	compar
11 13 .ost 1 25	ison
8 21 11 t 0 6 15 13 d gn 9 0 Presume most powdery mildew. 7 20 25 d gn 1-2 7 12 17 or 3 Fruit. Vines and lys. all d	
milde 1-2	
O dead	
2.7 to due t	
u or 2.7 d or due to p.m	
9/4/6	
, 0 6 9 2-6	

## LYCOPERSICON ESCULENTUM

Seeds treated with Arasan 75. Seeded in gh 4/16, 45 seeds/band. Pricked off 4/28&29/69. Set in field 5/27. 13 plts./acc. Spacing  $8'x2\ 1/2'+6'$ . Fertilizer  $640\ 1b$ . 10-20-20/A. Notes taken 8/18/69.

Col.	m	Col. 3 Uniformity:	9=very	5=medium	l=not uniform
Col.	4	Habit:	s=semi-determinate	i=indeterminate	d=determinate
Col.	5	Vigor:	9=very vigorous	5=medium	1=prostrate
Col. 6&7	587	Plant height and width in inches:	inches:		
Col. 8	$\infty$	Maturity:	9=very early	5=medium	l=very late
Col.	0)	Fruit set:	9=very heavy	5=moderate	l-very light
Col.1	0&11	Col.10&11 Fruit depth and diameter in centimeters	in centimeters:		
Col.	12	Fruit shape:	fl=flat	g=globular	
Col.		Fruit:	UR=uniform ripening	GS=green shoulders	
Col.	77	External color of fruit:	9=deep red	5-medium red	1=light red
Col.	15	Internal color of fruit:	9=deep red	5=medium red	1=light red
Col.	16	Number of locules:	9=very many	5=moderate	l=few
Col.1	7213	Col. 17&18 Cracking in radial and concentric types:	ncentric types: 9=much	ch 5=medium	1=little
Col.	19	Fasciated fruit:	9=many	5=medium	l=few
Col.	20	Blossom end rot:	0=severe	5=moderate	l=little

	144462		291354	291352	291349		291347	291339		289278		289275	289274		289273		289272		289271		289270		289240		270280	270275		270250	P.I.No.	
1	Israel	'Nai-jang	'Mgu' China	China 6	China	'Fan-que	China		'Isobilje'	Hung.	Niedrig	'Grunsovoj Hung. 9	Hung.	'No. 37	Hung.	'No. 10'	Hung.	Rheinlands	Hung.	'Steyerische	Hung.	'Fruhe	Hung.	1 Pearl	Very to		Texto	Tex.	Orig.	
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rieavy 3	i	ked for	01	8 pink	6	locules.	9+	56	•	9	VARV	9+	9+		9			very s	$\infty$	dwarf		Sts	+6	Altomosis.	9+	0		Lycopersicon 9 5.0	Set	•
VELY	0	r field	5.2	pink skin.	4.0	, DOO'S	0.4	5.3	``	4.5	tactv	J1	4.0		2.4		4.0	sweet,	4.5	dwarf plt.	4.2		3.5 4.5		4.7	5.0		•	Doth.	
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Fruit	Diam			,	-i	0.9	nd tomato.	8.5		5.5		6.5		2.0		5.5		6.7		5.5			5,5		5.5		2.0		5.5	7.2	
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	Set		itavori c 6 8	1 folded			ದ	9	field t	6		ω		<del>+</del> 6		9	tour.	Φ		Φ		0	Ω		0	٠	0		CV.	6	
	Mat.			ves all	o concentric	8	between	m	for f	m		<u></u>	ur.	<u>-</u>		7		7		<u></u>		9	10		<u></u>	ld tour	_	0	5	<u></u>	
Plant	Wth.	32	Excellent 3 48		4 た た り	50	a cross ]	72	Staked	75		70	field tour	15		63	for field	28		141		14	38		36		45	tour	34	148	
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	Vig	<u></u>	Gribovskii.	wilth			Looks like	0	Climbing'	0		0	Staked f	_	61 (1)	0	St	_		7		Φ	7		7	Sta	0	ed for	7	6	Sunrise
	Hab.	ਲ :	i noot	Has	SVerv		Lo	٠,		۰,-	£0 £	d	Str	ק	ature	•	type)	つ	e- 	p	H	op-4	q		q	ft,	ಶ	Staked	ſΩ	•	nmer
	Unif.			o= e, 1		8		$\infty$	Crop	9	Tomato		C521	0	Mini	0	id t	0,	Dwarf	$\infty$	Dwarf	<u></u>	$\infty$	la,	0	Zukmft'	0	-	6	_	from Summer
n°t		6 1	LYOY!	nter	200	1	ngo		П		OW.				in l		acid							coca.				a.	0,		fro
ul. co	Orig.	Israel	Ohio 9	'Tatinter'	Ohio 'Tatura'	Ohio	'Tomango' pulp.	Mich.	'Trip	Scot.	'Yellow	Ohio	'Libby	Tex.	'Haroin Miniature	Can.	(high	U.RI.	FR.H.	U.R.J	'R.I.	N.Y.	Can.	'Portocala'	Can.	'Sperls	Can.	'Sofia'	N.Y.	R.I.	Sel.
Lyco. escul. con't	P.I.No.	294442	303792		303793	303798		303799		303812		309671		309675		338239		G-18853		G-18854		G-18962	G-19071		G-19072		G-19074		343828	G-10362B	

Blsm.	End 02	Rot		0		0		0	
Amt.	Fasc.	Fruit		0		0		0	
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ر د د د	ı	Jnif.		00	11 13	6	Manh	0	Ne
ul. con't		Orig. Unif. Hab. Vig.		Harris 8 d	'Campbell 1327'	Harris 9 i	H-876 'Manhattan	Harris	H-98- 'New Yorker'
Lyco. escul. con't.		P.I.No.		H-855		G-18526		G-18527	

### PHASEOLUS

## 1968 Greenhouse Beans

# Second, Third, & Fourth Plantings

Seeds treated with Arason 75. Second planting planted 8/22/68, third planting planted 9/12/68, and fourth planting planted 10/29/68 & 11/14/68. 3 seeds/8" pot. 8 pots of each accession for the second and third plantings and 6 pots of each accession for the foruth planting.

<pre>l=least h=half-runner l=poor l=poor</pre>	y=yellow pl=pale l=poor v=variegated pr=purple	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	And planting) Seed Shape ov-oval pl-plump ig=large fl=flat  3rd & 4th planting) Seed size: s=small m=medium l=large  2nd planting) Seed color: gy=gray t=tan w=white pr=purple spl=splash  3rd & 4th planting) Seed shape: ov=oval pl=plump lg=large fl=flat  2nd planting) Virus disease 0=none l-3=little  3rd & 4th planting) Seed color: w=white pr=purple spl=splash t=tan blk=black  nd planting) Bacterial disease: 0=none  3rd & 4th planting) Virus disease: 0=none  3rd & 4th planting) Virus disease 9=much l=little
<pre>5=medium p=pole 5=medium 5=medium</pre>	pr=purple 5=medium n centimeters reen wx=wax	r=round c=curved - stringless m=medium 9=most 5=med	And planting) Seed Snape ov=oval pl=plump lg=large fills & 4th planting) Seed size: s=small m=medium l=large 2nd planting) Seed color: gy=gray t=tan w=white pr=purpl 3rd & 4th planting) Seed shape: ov=oval pl=plump lg=large 2nd planting) Virus disease O=none l-3=little spl=splash 3rd & 4th planting) Seed color: w=white pr=purple spl=splash r=red br=brown or=orange gy=gray and planting) Bacterial disease: O=none l=little 3rd & 4th planting) Virus disease 9=much l=little
9=very b=bush 9=very and width in inches 9=very	nting to bloom  w=white pr=purple 9=heavy 5=medium st and width of leaves in centimeters es: (green) gn=green wx=	Leaf shape:  Straight or Curved s=straight c=curv Stringless or strings: + strings - strin (2nd planting) Seed size: s=small m=med (3rd & 4th planting) Shattering 9=most	And planting) Seed shape ov=oval pl=plump 3rd & 4th planting) Seed size: s=small m=medi 2nd planting) Seed color: gy=gray t=tan w= 3rd & 4th planting) Seed shape: ov=oval pl=plu 2nd planting) Virus disease 0=none l-3=little 3rd & 4th planting) Seed color: w=white pr=pur r=red br=brown or=orange gy= 3rd & 4th planting) Virus disease: 0=none 3rd & 4th planting) Virus disease 9=much
Uniformity: Habit: Vigor: Plant height and Leafiness:	Lays from planting to bloom Flower color:  Set:  Days to harvest  & 13: Length and width of lector of leaves: (green)	Leaf shape: Straight or Curved Stringless or strin (2nd planting) See (3rd & 4th planting)	Col. 19 (2nd planting) Se Col. 19 (3rd & 4th planti Col. 20 (2nd planting) S Col. 20 (3rd & 4th planti Col. 21 (2nd planting) Vi Col. 21 (3rd & 4th planti Col. 22 (2nd planting) Ba Col. 22 (3rd & 4th planting) Col. 22 (3rd & 4th planting)
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							Н	Days		Da	Days				co.	Strg.	50				
					Plant	nt		to Flw.	lw.	4	to	Les	Leaves		or	r + or	12	Seed		Disease	ase
P.I.No. Orig. Unif. Hab. Vig. Ht.xWth. Lfy. Bl.	Orig.	Unif.	Hab.	Vig.	Ht.x	Wth.	Lfy. E	31. C	Col. S	Set Ha	Harv. L	Lgth.xWth.		Col. Si	Shp. C	1	Sz.	. Shp.	Col.	Vir.	Bact.
Phaseolus - 2nd planting	us - 2r	id pla	nting															lg 21			
289378	Hung.	6	Q	0	19	21	$\infty$	27	×			16.1	2	gn fl	1 s-c	+ 0	Ħ	. 10	gy t	0	0
295343	Austral 9	119	Q	0	1108	æ	<u>-</u>	27	M	9	72 1	9.5	L . 3	gn fl	L S	+	日	1g ov	Μ.	0	0
	Resemble Kentucky Wonder.	ole Ke	ntuck	y Won	der.	Ç.	Westralia	ralia	• on												
302537	USA	ω	8 hr	Φ	35 14	14	7	25	pr	8	1 94	10.5	L.3	wx fl	l S	ŧ	SFIL	lg ov	W	0	0
	Attractive wax pod; some seeds truncate.	tive	wax po	od; s	ome s	eeds .	trunce	ate.													
302539	USA	-	7 b-hr 9	6	26 14	14	_		¥		64 1	1.0 1	7 - 7	gn fl	S	+	13	fl ov	W	02	0
G-18522		7	Q	ω	30	54	ω		W	8	75 1	11.1	1.2	gn fl	S	\$	日	lg pl	W	0	0
	'Harvester.' H-3513	ster.	H-35.	13																	
302541	USA	0	Q	0	9 26 18	18	6	34	pr	6	78 1	16.0	1.0 gn	gn.spl	r cv	+ 788 8	m 1g	pl k	t spl	0 1	0
	Excel!	Excellent set, attractive	et, a	ttrac	tive	pod.													pr		
302542	USA		hr	9 41	41	20	<u></u>	35	M	0	78 1	10.6	1.2	WX fl	1 c	ı	S-E	lg pl		0-3	0
																		00			
319644	Mex	0	م	0	22	16	6	35	pr	7	71 1	13.6	7.7	gn fl	S	+	S-m	- 00	<b>&gt;</b>	1-3	0
						(												lg ov			
G-18523		0	, م	0	77	18	<b>t</b>	29	¥	\$ ±6	85 1	12.5	1.0	gn fl	S	•	日	lg pl	t spl	0 1	0
	Tende	Tendercrop.	Çen.															AO	pr		
							H	Days			Days					S Strg.	£0				
					Plant	unt		to.	Flw.		to,	Ţ	Leaves		0	or + or	H		Seed		
P.I.No. Orig. Unif. Hab. Vig.	Orig.	Unif.	Hab.	Vig.		Ht.xWth.	Lfy. Bl.	1	Col.	Set F	Harv.	Lgth.xWth.		Col.	Shp.	0	Shat.	t. Sz.	Shp.	Col.	٠.
Phaseolus - 3rd planting.	us - 31	d pla	nting																		

Excellent yield. Some pods hort, type - reddish.

Phil. 7 p 9 112 19 8 38 w 9 85 10.7 1.1 gn gl S + 9 m fl gl w

Pods pinkish tan when dry. Seeds flattish & glossy. Too short to be oval. Excellent yielder. Very m-lg fl ov w ഗ gn : fl 1.5 15.3 96 16 Excellent yield.
Phil. 7 n 296319B Phil. 296319A Phil.

pl ov pr spl + 9 sm flov blk 0 + uniform. Frequent doubling. Brown, bacterial spots on some pods. USA 8 6 10.9 1.5 gn spl fl S Pod constricts around seed, some pods reddish when mature. Rev. 7 p 9 54 19 9 39 pr 8 84 9.2 1.0 v r Mex. 302538 165435

Mex. 7 p 9 54 19 9 39 pr 8 84 9.2 1.0 v r S + 9 sm flow blk 4 pots original seed; 4 pots Natti seed. All germination good. Many purple tinted pods. Seeds black,

sm pl ov 0 Ŋ 9+ 88 12.2 1.1 pr fl Pods purple-blue when mature. white eye, both glossy & dull. Dry pods deep purple to almost tan. Mex. 8 p 7 75 18 37 pr 9+ 88 12.2 1.1 pr Heavy yielder. Pod constricted around seed. Pods purple-blue when n Pod constricted around seed. 203958

0

		Mirus	
		Col.	
	Seed	sz. Shp.	
		Shat. Sr	
Strg.	or	2	
SSt	or + or	0	
		Shp	
	Leaves	xWth. Col.	
	Lea	.xWth	
		. Lgth.x	
Days	to	Harv.	
	•	I. Set	
Ø	to Flw	Co1.	
Days	to	FI.	
		Lfy.	,
	Plant	xWth.	i
	1	HH:	,
		Vig	•
		Hab.	
		Unif.	
		P.I.No. Orig. Unif. Hab. Vig. Ht.xWth. Lfy. Fl.	1
		I.No.	
		4	

Phaseolus - 3rd planting (cont.) Greenhouse

Pods tan & brittle. Good yielder Most pods tan, few splashed or speckled purple. 85 13.3 1.2 0 39 W 82 11 7 Pods thick wall. Switz. 262164

Attractive seed.

K Switz. 7 p 7 69 14 8 39 w 9 85 9.8 1/2 gn r c + 5 md plov Some purple speckled pods. Some green splashed purple. Pods wrinkled or wizened longitudinally. Good yielder. Attractive seed. Pods greenish tinted even when dry.

## Greenhouse Phaseolus - 4th planting.

4 sm-+ Peru 7 p 8 72 15 7  $\mu$ 7 pr 8 9 $\mu$  9.0 1.3 gn fl s Pods in pairs or triplets. Some bacteria spots on pods. 5 seeds/pod. N.Y. 6 p 7 6 $\mu$  15 7  $\mu$ 8 pr  $\mu$  98 9.5 1.6 gn fl s 269206 Peru

plov t spk 2 18 273452-A N.Y. 6

plov dr All pods singly. Slender pair stems. Pods green splash purple. Very much constricted btw seeds. between seeds. Curved beak. Tough fibrous pod wall. 5 seed/pod. Very uniform. Chile 7 p 8 40 15 6 48 pr 6 104 11.5 1.4 gn fl c + 3 md plov Very vigorous & leafy late, slow maturing. 7 seed/pod. Pods constricted. Seeds dark red. Seeds 282011

N

5 md-lg fl ov gy str Borne in pairs. Some pale very large leaves. Planted 10-29. Seed grey striped brown. 62 16 7 49 1t pr6 90 13.0 1.4 gn fl inclined to sprout in pods.  $\infty$ Chile 282021

2 18 7 40 1t pr5 98 14.3 1.8 gn fl s 5-6 sd/pod. Orange eye. Pods faintly splashed purple. 44 17 Chile 6

Very large dark green leaves. Large pour Splashed reddish brown.
Splashed red turning purple. Seed brown striped reddish brown.
The chile 6 p 8 65 15 6 40 pr 8 85 11.8 1.5 gn fl s + 7 md and chile 6 p 8 65 15 6 40 pr 8 85 11.8 1.5 gn fl s - 7 md 282102-CB Chile 6

Phaseolus coccineous. Flowers must be tripped to get set. Very large, tough flat pod. Dry pod wall tinted pinkish. 4 seed/pod. Most pods in pairs. 2 kinds of pod, 1 tinted red, other splashed pr, Italy 8 p 7 100 15 5  $\mu$ 5 w 3 90 16.5 2.3 gn

N.H. 8 p 8 120 18 5 65 w 3 104 16.5 1.5 gn gl cv + 6 md-lg flk w Planted 11/14/68. 'Champagne' &/or 'Glacier' Pods splashed purple. 7-8 seed/pod. Some ovule abortion. Had mosaic in it and yield was reduced. 19007

Ď.		Shat. Sz. Shp. Col.
Strg	or + or	1
02	F.	'
ಭ	0	ان اد
	Leaves	Lgth.xWth. Col. Shp.
Days	to	Harv.
	W.	Col. Set.
	FIM	
Days	to	EI.
		Lfy.
	Plant	二
		Vig.
		Hab.
		Unif.
		Orig.
		P.I.No.

Phaseolus - 4th planting (cont.) Greenhouse.

Neth. 4 b-p 7 24-55 17 5 134 w 6 174 12.8 1.1 gn fl c + 9 md pl ov w P. vulgaris x P. coccineous. Planted 1/22/69. Notes 4/18/69. spl pr Variable in earliness. 7 seed/pod. Leaves large 13.5 cm. x 9.5 cm. Some pods splashed purple. 6 seed/pod. 263001. Neth. 4

Conn. 3 p 6 45 24 7 172 y Pease bean. Stems & pet. streaked dark purple. Purple axils. Branches solid green & bent near point of attachment to main stem. Leaves dark green broad, blunt pointed. Rhiz. brown streak lesions near base of stem. Drought susceptible. Leaves 12.8 x 9.2. G-19015 Conn.

### PHASEOLUS VULGARIS

l seed/l l/2" 2-9' rows in r l l/2' apart +  $\mu$ ' alley - 10' between rows (stake to stake) Fert. 640 lbs. 10-20-20/A. Planted 5/29/69. Notes taken 8/19/69 & 8/27/69.

Diseases Vir.Bact.	N		<u>د</u>	5	3-6	٦	0-5	1 0-2	1-3	_	0-5		2-3		-1 0-2	н	C	N	0-3 1	1-3 1-5
Vi	m		4	stk 2	-	N	Н	0-1	2	0	0	W	4		ĭv 0−1	m	r	<b>→</b>	Ó	H
Color	d rd spl pk		M	W S	03 F		×	×	A		pl gn t spl	pk & w			dp lay	*		_		¥
			obl	ΔO	> °C		NO N	NO N	00			pk		6		obl		M AO	<b>X</b>	ob1
Seed Shp.	obl		£1	Td	H	obl	n pl	n pl	T <sub>d</sub>	obl	obl		OV	pl	obl	m pl	r	D D	OV	닦
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Curv.	2-7		3-7	1-4	N	1-4	1-3	2-4	1-3	1-3	1-2		m	3-5	2-5	2-7		14	1-8	2-5
Shp.	r		<b>G-1</b>	Fi	G-I	H	Si	4	ÇI	H	<b>G-1</b>		Ç-I	ы	ے ہو	Fi		۶۰۱	Ç-I	<b>6</b> -4
Co1.	Phaseolus vulgaris	ល្	m gn	us m	m gn	ug m	yell	1 gn	m-dk	gn 1 gn	yell m-dk	gn	dk br	dk gn	1-m gn		yell	m gn	gn	gn
	Phase 1.3	vulgaris	1.3	1.3	L. L	1.0	1.0	6.0	1.0	1.0	1.1		1.1	1.0	5 1.3	1.2		0.7	1-m	1-m
Plt. (cm.) Lgth.Wth.														ž.	- 5 - C					
Pit	orus 11.0 dew.	olus	10.0	9.0	7.5	12.5	11.2	9.1	8.2	9.0	10.0		6.1	6.6	12.5	13.0	•	0.9	1.2	1.3
Days to Harv.	7 18 19 8 90 11.0 Very susceptible to powdery mildew.	Phaseolus	104	90	110	98	90	90	§ 90	06	98		104	96	3 90 12	90		96	10.0	0.6
Pod	Sulus 8 powd		2-7	7	Н	$\infty$	00	1-9	5-7 28	9	2		٦	9				N	96	98
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Pl. " Ht.Wth.	18 19 suscep		17	15	20	77	17	18	12	17	72		14	14	18	18	ı	<u></u> =_	10	Dutc 21
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Vig.			7	1-9	ω	0.	rield tour.	field tour.	field tour.		tolerance.	tolerance.	m	m	Austral.b 9 18	20 E	'College Supreme'	2 <del>1</del>	Fr. b 3 13 1	Case Knife' or 'White Dutch' Fr. p 9 35 21
Hab.	ь 1100		Ω -	b b	N.Y. hr	م م	ror b	for f	for f	ф	BV <sub>1</sub>	BV <sub>1</sub>	,۵	Q	و م	T Q	Sup	تاريخ تاريخ	AUT Q	i fe D
	She			ptan e e	MO T	,	<b>d</b>	ed و	ed		have	have	•		ral.	ral.	lege	٠ ح	ото	e Kn
Orig.	N.H. b 'Red Shellout'		Yugo.	Maine b		Nor.	Staked Pol.	Staked Pol.	Staked Pol.			May have BV <sub>1</sub>	Neth.	Neth.	Austral.b	Austral.b	Col	Neth.	Fr.	Cas Fr.
P.I.No.	G-18822		251047	273451	273452B	276327	285695	285696	285697	285700A	285700B		287536	287537	302396	302397	1	302467	310469	310470

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0.2	Sz.		S-m	n-1	ш	В	Ħ	ر د	EI	, ,—	S-m	a	- -	Ħ	H		8	EP.	<b>B E</b>		
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	Curv		ά	H	ή	H	Ċ	H	Ċ	H	Ö	Ġ	Ϋ́	m	Ċ	H	N	ri (		2	
	Shp.		<b>9</b> н	H U	н	<b>4</b> -	ы	н	9-1	S <sub>H</sub>	<b>9</b> -1	ы	H a	H	H	n f	ç,		4 A		
	Col.		1-m	1-m gn	m-dk	m gn	m gn	m gn	ı gn	l gn	spl rd m gn	1 gn	spl pr l-m gn	1-m gn	y spl	rd & l-m l-m gn	n gn	gn.	1-m gn	gn	
n.)	1		1.2 1	1.2	1.2 ш	1.0 m	1.0 1	е 6.0	1.1 m			1.0	1.0 1	1.2 1	1.5 y	rd 1.1			7.7	1.2 =	
(CE	Lgth.Wth.						5			2 1	ods.										
Plt.			15.4	15.0	10.4	11.5	11	11.5	12.7	15.2	constr. pods 98 9.8 0.8	11.6	15.0	14.5	8.0	(C)	8.5	9 1	12.5	12.0	
Days	Harv.		104	90	8	8	96	104	96	06	suos 86	8	90	90	99	98	104	104	2 2	104	
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\$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100	Ht.Wth.		27	17 21 w 9 slightly constricted	18	12	22 19 w field tour.	1		15	sultu 20	77	12	13	13	56	22	22 1	16	17	
P1.			56		17	17	22 r fie	20 or fi	11	77	Horticultural beans. 43 20 pr 6	18	13	13	13	64			30	our.	
	Vig.	ıt.)	0-1	Some pods	Tenn. b 9 17	2 2 3 3	7 and for	Staked for field	9	-	.0	Φ	0	4	9	rif O	ω (	2-0	5-7	for field tour. b 7 15	
	Hab.	(co	Austral. b 9	ב ב	+ 0+		-r Staked	b Sta	م		preliout		een		0	dwarf	h-r	•	•	r fi	
		garis	ral.	Austral. '66-526'	d d	Q ·	Austral.h-r'Bland' St.	ral.		,	N.Y. p	q q	Tendergreen R.I. b	Д	Д	Bean, d.		Ω	г. Ър		plants.
	Orig.	Phaseolus vulgaris (cont.)	Austral.	Austral. '66-526'	Tenn.	Tenn.	Austral 'Bland'	Austral.	Austral.	N.H.	N.Y.	T E	R.I.	R.I.	F1a.	N.Y.	N.Y.	N.Y.	M.I.		3 pJ
	No.	eolus	11	12	72A	72B	85	98	88	145	192	193	361	110	424	200			·Ä	366A-	
	P.I.No.	Phas	316911	316912	319872A	319872B	340985	340986	340988	G-7445	G-10192	G-10193	G-10361	G-11110	G-11424	G-11500	G-11503	40CTT-5	G-12	G-12	

}	Diseases or Vir.Bact.		8 2 3-4 sp1	br spl 0-1 0-1	3 1-4	spl 1-32	pl 0-3 0	spl 2 3	ipl 6 3	sp 0-1 0-1	br 0-2 7	b1k	0 1	2 0-1	or 0-1 0-2	spl 0-1 0-1	W 3 1-3	ר	k sp 3 0-1	s sp 0-2 0-1	or 1 1 spl t	
	Seed Shp. Color		ob br & 1 br spl		w br	ob w sp.	ob w spl	ob w spl	ob wspl	15	br &	ĎĬ	ob br	ob br	ob w&br	spit ob brsj	13		ob blk	ob blk	ov w&br &blk spl	
	SZ.		O EL	qo m-s	ш	B	<b>E</b>	0	O E	qo m-s	E		0	0	S-B	9	۲.			m-1 o	0 = 0	
	Shat.		ω	#	#	77	4	<b>∨</b>	10	<b>†</b>	ΓC	`	4	4	2	9	7	- '	9.	<b>=</b>	9	
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	Shp.		H	ы	H	ы	ધ	H	Ħ	H	۶	1	ы	н	ы	H	¢_		H	ы	H	
	Col.		l gn vell	1.gn	yell 1 gn	ug m	m-d gn	1-m gn	yerr m gn	1 gn	yell	yell	l-m gn	l gn	m gn	1 gn	1-m		m gn	m gn	m gn	
	(cm.) Wth.		1.2	1.0	6.0	0.8	1.2	1.0	1.0	1.0	0,	) •	7.0	6.0	1.3	1.0	0	ì	0.0	0.8	1.0	
	Plt. (cm. Lgth.Wth.		13.2	14.2	10.7	10.5	13.8	11.5	12.5	11.0	10.0		10.0	11.5	13.3	12.0	, O	) •	12.7	11.3	8.5	
Days	to Harv.		06	104	90 90	110	98	area.	104	90	our. 98		90	98	98	90	00	)	90	8	98	
	Pod Set		_	ω	some disease tolerance.	H	ω ,	on hilum 8	7	9	field tour.	)	7	<u>-</u>	-	5	7	1	9 '	9	ر. در	
	Flwr. Color		M	W	ଚନ୍ଦ ଚନ୍ଦ				×	W	for f		A	· [3	W						w & pl pr	
	Pl. "Ht.Wth.		17	20	e dis	14	20	Brown mostly 18 19 w	area. 26 27	17	aked 20		21	18	18	12	nce.	j	20	22	28	
			14			12	18	Brown m 18 19		17	Sta	ot #1.	18	54	18	10	olera	1	77	17	746	
	Vig.		#	0	May have 3	7	∞ ,	5-9 6-7	Some prown on milum R.I. b 9	5-7	disease free.	om pla	1-1	6	_	cone set.	May have disease tolerance.	,	9	5-7	0	
	Hab.	ris	م .	۵	م ع	R.I. b	ِ م	yellow-pink pods. R.I. b 6-	rown c b	n q	diseas	ion fr	۾	B R.I. b	- Q	wax co	ve dis		മ	۵	Q	
	P.I.No. Orig.	Phaseolus vulgaris	G-12366-AE R.I.	G-12366B Loomis	Garden G-12366BS R.I.	G-12366BSAA R.I.	G-12366BSC R.I.	g-12366c R.I.	G-12366CS R.I. b	G-12366D N.Y.	C-12366DS N.Y.	Selection from plant	G-12366DS <sub>8</sub> A	G-12366DSB R.I.	G-12366-E N.Y.	G-12367 - b	G-12370 N.Y.		G-12388	<b>G-</b> 12389	G-12389SB	

Bact.		0	_	0-1		0		0-1	[	1	1-4		7		5		<b>-</b>		-1	0		<b>†</b>	1-2		2	Н	•	o p	. 29
Diseases Vir. Bact			د ده	OI OI	t t		t t	,	ے ب	نه ا	,	دہ			5		2-6		ີ ກ	0			rd&br 2-3		$\sim$	8			+6
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001.		1-m gn	m-d gn		·	gn		1-m gn	מש ווייין		1-d cn	.0	m-d gn		1-m gn		1-m gn			gn		m-d gn	spi pr l gn	yell		m-d gn	7 m	100	m-d gn
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(cm.)		1.0	0	-		0.0		1.0	_		1.0	l			-		i			0.5		۲.	1.0			1.0	0	-1	0.0
Pit. Lgth		11.5	0.00	14.0		12.5		14.0	0 11	1	12.0	the p	13.8		12.6		12.8			11.5		14.5	11.8			16.0	0	1.	8.0
Days to Harv.		98	110	98		96		8	O	) \	98				104		98			104		104	90			110	0000	2	86
Pod		9	N	8	no	7-8	on	ω	7	-	1-7	About	7-4		2		9			N		3-5	8	•	0	2	5-7		N
Flwr.					selection		selection	•	Notan's selection	R862 Dolan's selection.	¥	Dolan's selection							.63	yell		pr	×	f	pl pr	W	ייר [ת		
Pl. "Ht.Wth.		19	19	22	Dolan's	15	Dolan's	19	s sel	s se]	12	S S 6 ]	10		13		20	ת	125/6	22		77	20		21	15	7	9	12
P1. Ht.		30	25	18	Dol	16	Dol	18 19	Ten's so	lan's	13	lan'	12 10		16		21	27	0 S S	70		[7]	15	(	92	36	77	+	27 nch'
Vig.	t.)	5-7	5-7	. ω	1-29	7	R-862-2			, 2 , 2 Do	3-5	52 Do	9	ion.	1-4	,	9-4	1	No pods 8/25/69.	6		0	7	t		4	2,15	'Sulphur Bunch Bean'	Ind. h-r 2-5 27 White Six-Weeks Bunch'
Orig. Hab. Vig.	vulgaris (cont.)	h~r	h-r		p R-8		p R-6		P K002	D R86	4	p R86	4	elect			hr h	1	ng.	)	ಹೆ			50	125/6		•	Bunch	h-r Six-Wee
出	aris	ģ	ġ	۵	rcro	۵	rcro	۾	rcro	rcro	۾ '	rcro	م ٔ	S	۵,	160	hr Red k	3 6	r eari	Q	y pe	ρι	م و	atin	ය යි	р Д	n a h	hur	e Si
Orig	vulg			لے	Tendercrop R-862-1	01	Tendercrop	C E	rendercrop	Tendercrop	10	Tendercrop R862	10	Dolan's selection.	G-12905-B N.Y.	Cross 160	M.Y.	Mo	Everbearing.	N.H.	Kidney pea.	N.Y.	Mont.	'Gallatin 50'	Mex. b No nods 8/25/69	मार.	Indiana h	'Sulp	Ind.
No.	Phaseolus	390	726	G-12684-1		G-12684-2		G-12684-3	684-1		G-12684-5		G-12684-6		905-1		606	003	2000	239		1241	8448	t C	100	167	175		179
P.I.No.	Phas	G-12390	G-12456	G-12		G-12		G-12	G-12684.		G-12		G-12		G-12		G-12909	5-1303	1	G-13239		G-13241	G-13478	-	G-1350 P	G-14167	G-14175		G-14179

ases (	Bact.		6	0		0 N		1-3		0		2				m		<b>†</b>		m		m	0-1	l >		-	4	0	8	
Diseases	Vir.		7	0-1		3-1	) ·	m		-		7		$\sim$		m		1-6		2		$\sim$	_	ł		<b>-</b>	4	0-1	0	
	Color		Þ			₩ ye-br		×	blk			W		M spl	br	₩	dk rd	t spk	pk			ct.	M qo			7	:	pr spl	M W	
	Shp.		qo			ov		qo				ΔΟ		qo		op.		qo				ΛO	f.1			710	5	qo	qo	
	Sz.		m-1			n n l	shiny	Ħ				Z A		日日		m-1		Ħ				ω	E	i		F	1	S - II	Ħ	
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	Curv.		72			2-2		1-2				1-3		1-3		1-3		2-4				N	4		Ş	7-3	1	1-4	1-4	
	Shp.		G-I			FI FI		4-4				Si		<b>9</b> -1		4-1		G-1				H	Ç.,	1		2 LIS	•	ы	ы	
	001.		d gn			1-m gn 1-m gn	)	m-d gn				1-m gn		l gn		1-m gn		m-d gn			8/25/69.	tan	d gn		2 C	or com	(1)	l gn	c	
	1 .1		1.0			H 0.		1-2				1.0		1.6		1.5		1.4				0	1.0					1.0	1-m gn	
Plt. (cm.)	ch. Wth.																								1,000	200				
PI	Lgth		15.5			9.6		7.0				8/0		8.8		13.8		0,00			row; no	13.5	6.5			1	1	13.0	1.0	
Days	Harv.		104			8 8	•	98			•	98		96		104		98			in	104	107		Q+020404 C4040	מדחדה			11.5	
Pod	Set		2			2-5			lum.	0		2-3	. ,	9-4	1.	2-5		2-5			plant	ł	N	ineou	, C & C	o n c	\	0	8	
Flwr.	Color		ن ) ان	prants dead.	.60	M W			Black hilum.		8/25/69.			W	Brown on hilum.	W		15 16 pl pr 5-7		W	Champagne' and/or 'Glacier'. Six plants	No nods 8/25/69.	M	Phaseolus vulgaris X Phaseolus coccineous	Q+ 000	W	:		. W	
<b>#</b>	Ht.Wth.		15	80 8	125/6	16		_		N		12		15	o mwc	19	1	16		10	cier	26/2	33 13	aseol		21		21	16	
P1.					ds 8	15		10	lant	23 12	No pods	2-3 31 12	ants	19 15	Br	18 19		15		12 10	Gla	26 pod:	33	X Ph		70		18	18	
	Vig.	ont.)	2-7	2-4 7	No pods 8/25/69.	2-7		2-3 10	Five plants.		dead.	2-3	Six plants.	5-6	'Maine Yellow Eye'.	ω		_		14	and/or			garis		6	Eye '	2-9	7-8	
	Hab.	3 (0	Q F	p q	nts.	മ, മ		Q	ot			h-r	ch c	م	ello	٩	_ ਹ	ر م	Bean	Q	ne	hr Faven Re	ρ	S		hr	110W	, م	9	H
	Orig.	lgari	Ind. p	JOK FC	Nine plants.		Wax bean.		ದ್ರ	1	Some plants	S. Car. h-r	1 Dut		aine Y	ç.	'Mariposa'	India b	Chudiak Bean	N.H. p	ampag		Neth. p	nseolu			Ye	Harris	Harris b	T A C S C
		us w		3	Nin	Can.		•											Chi	N.	17	e1	Net	Phe		Agway		Har	Har	D C
	P.I.No.	Phaseolus vulgaris (cont.)	G-14912	263001		263001		G-16803		G-16925	٠	G-17374		G-17839		G-17864		G-17934		G-19007	1	G-19015	263001			G-12728		09-н	G-18522	

	oct.		77		0						12	
	Disease Vir.Bact.		pr spl 1-2		0		Н		-		H	
			spl	pink		lt br	2	spl pr	N	spl br	9	
	Seed Shp. Color		pr	pi	4	14	pk	spl	ov t	spl	b <b>r</b>	
	Seed Shp.		qo		m-l ov		qo		f] (		qo	
	SZ		日		- E		Ħ		Ħ		~	
	Shat.											
+	or		1		i		1		+		+	
	Curv.	(cont.)	1-4		1-4		3-6		1~2		1-2	
	Shp.	son	ı,		¢⊸i		H		F C	٤.	F F	
	001.	compari	13.0 1.1 1-m gn r		12.0 1.8 m gn		12.0 1.0 1 gn		1-m gn	spl pr	m-d gn	
	cm.)	for	1.1		1.8		1.0		1.1		1.2	
	Plt. (cm.) Lgth.Wth.	ncluded	13.0		12.0		12.0		10.0		10.0	
Days	to Harv.	vars i										
	Pod	culti	ω		7		6-8	-	7	,	9	
	Flwr. Color	Standard cultivars included for comparison (cont.)	7-8 17 20 pl pr 8				pl pr 6-8		W			
	Pl. "Ht.Wth.	St	20		24		12 13	1	19		20	
			17		t2 6t		12		3-6 33 19		19	
	Vig.		78		7		9	(	3-0	,	6-8 19 20	Red Kidney.
	Hab.		۵	crop	Q		۵		hr		م	
	Orig. Hab.		Harris b	'Tendercrop'	Harris p	Romano	N.Y.		I Idaho		Harris	Calif.
	P.I.No.		G-18523		G-17415		G-17447 N.Y.		Pinto III Idaho hr		3235	

#### PHASEOLUS

#### 1969 GREENHOUSE BEANS

#### planted in greenhouse 8/1&12/69 notes taken 9/19/69

l=poor hr=half-runner l=poor	1=sparse	l=poor		r	d -=stringless	l=least		3
5=medium p=pole 5=medium	5=medium	Fr-purpre 5=medium	wh=white	=round	s=straight c=curved +=strings	5=medium m=medium	pl=plump pr=purple r=red	
9=very b=bush 9=very	9=very ing to bloom	y=white 9=heavy sing to harvest	Length and width of leaves in cm. Leaf color	f=flat	889	9=most s=small	ov=oval	O=no disease
Uniformity 9=very Habit b=bush Vigor 9=very Plant height and width in cm.	Leafiness Days from planting to bloom	Pod Set 9=heavy Days from planting to harvest	Length and width Leaf color	Leaf shape		Shattering Seed size	Seed shape ov=oval Seed color w=white v=variable	Virus disease Bacterial disease
Col. 3 Col. 4 Col. 5 Col. 6 & 7	Col. 8	1121					Col. 21	Col. 23

928	Vir.Bact.	0 ,	0		0	o 0	shape.	0	0			0 0	<b>&gt;</b>	0	Ó	is O		0		0		C	,	0	C	0	
Disease	Vir.		e seed.	n.		Kunner.	చ	0	ends. w 0			0 0		0	(	one		0	g	0 4	ంక	0		pr 0	(	var U	
	Col.	ы ;	whit	bear	ĭ ĭ	v w	Siz	t w		led.		W VO In	sd per pod			ov w This		OV W	sa/poa	var	dusky brown, &	Var	br	OV		aron	
		lg pl ov r	almost v md pl ov	type	lg fl ov	pl c	le in	lg pl rct	ingular at en md pl ov w	y fil		sm pl ov	sd pe					f]	77	md var	y bro	var var	tone	1 pl	r	md pr ov ck grey a	
	Sz.	18.1	md ]	erry	80	Solssons Large William 5 sm-md pl ov w	riab	18	angu	poorly filled.		Sm p	<b>'</b> ~			sm fl hilum.		v sm	00	md	dusk	Ver	two-	50	ŕ	Heck	
	Shat. Sz.Shp.	ω,	ashed 9	Cranberry type bean.	0, 5	5	Seed variable in size	0,	& rectangular at 3 md pl ov	ds, r		0,0			c	ound		8	n1gn	var	glossy	c	n, &	9	ey.	]e f.	
Strg.	1	r	o,			e or		cv -		Short pods,		+ 4	green.			cv + ing ar	)		tan.	•		,	brow	ε	ed gr	- Purp	
s st	0	+ 0	purple splashed, almost white s + 9 md pl ov w	ed re	+ 4	sekniie sl cv	less.	sl cv	s blur	Shor		\(\frac{1}{4}\)				st cr k rir				sl cv -	purple,	t/2	ple,	ທ	leck	Je.	
01 0		4-1	also p	eckl	ا ب	លី	d & stringless. 5.6 sd/pod.	4 4-1	5 sd/pod. Seeds blunt 1.0 gn-pr f-r s +	ood.		GH GH	ten			gn f slcv + 6 white, dark ring around		٢.	roas pinkisn	ĸ		٤	ur	H	Seeds purple flecked grey.	r-r s purpl	
	Col.Shp.	d	ds al	S T S T	4	nutcr n-pr	\$ 50 st	gn	od. n-pr	5-6 sd/pod.		<b>g</b> 2	persi	gn		gn white		gn	ods	gn	sd colors	gn	ddisł	gn	bnr	te +	
Leaves	1 1	1.4 gn		iped	Ω .	Like Duton Ca 1.0 gn-pr f	irved 1. 5	1.4 8	5 sd/p 1.0 g	9-9		0.8 gn	Some po	50		o O.y g				1.1	3 sd	٦,	ds re	1.18	Seeds	L.1 gn e white	
Ä	Lgth.xWth.		Led grey. Pods	, stı			ly cl	11.7	4	ted.									or end or pod.	12.7	od.	75,5	See			N 13.3 1.1 gn 1-rs - 4 md p1 ov var Seed 2 tone white + purple. Purple fleck grey around	
ro.		12	sted 12	white	16	5-0 sa/poa. 74 11	light	H	•ਜ	constricted.		0.0	ricte			Se		15	ena		sd/bod.		000	14	gd/	eed 2	
Days	Harv.	81	& speckled grey. Pods	Seed white, striped & speckled red.	7 0	74	ods s.	818		con ,		81	constricted.		l I	<pre>c) pod/ps</pre>				70	2-9	67	/ps 9	85		•	
	Set.		~ \O		m	8	een pods slightly curslightly corslightly constricted.	000	.1 whe	kled		0 4		_		4 sd/1	•	$\infty$	TT ar	pr 9	ted.	0 % C		0	cted	d/pod.	
FIW.	Lfy.B1. Col.	wh	striped wh (	sd/bo	wh	elnat	Greed. s	wh	spira w	wrin		<b>≥</b> 5		M	ſ	th ovule. 12		W	No call	1t F	stric	+	2 plants wax pods.	wh	nstri	wh 6 s	
Days	.B1.	40	<b>re</b> d 38	. 5	4 33 wh	37.	nged.	35	te, 38	tan,		7 50	rink	39	-	44 ovule		8 45 W	-ur	27 lt	con	7 34 1+	. S Wa	55 9 43	ot co	Sted.	
		7	Seed 6	urple	7	TOWIS	strir d. w	$\infty$	t whi	Pods			not 1	9		igh (	)	,	e De	∞	ou .	e. 7	plant	0	d, no	stric	
Plant	Ht.xWth.	80	5 sd/pod. Seed red 7 42 60 6 38	ned p	7 250 52	, yer 52	nt &	52	almos 43	on.	seeds	77 80 C	tan,	53		oک an, hi		5 48	peas	57	nkled	type.		55	inkle	noo s	
딦	H	09	sd/bc	plas	25(	rved 65	raigh	63	ide : 55	ecti	lue s	7 65	all .	90	(	62 sh ta		10,	ilke.	8 48	wri	Wax pod 8	pods	9+ 57	, Wr	bou .	
	Vig.	9	5	an, s	<u></u>	r o	re st	6	ge, w	t sel	ith b	<u>د</u> «	ds sm	<u></u>	c	p o pinki	ve.	6 9	ooks and h	8	tan,	• ∞ ∞	rell	46	ı tan	y ıkled	le.
	Hab	3 b+p	. tan. 5 b-p	OW to	<u>م</u> و	b-h	ds an	ą	large p-p	eran	pl w	다 다 나	Po	hr	,	9 nr-p 8 62 65 8 45 y Pods pinkish tan, high ovule.	acti	hr-J	יי מיי מיי	م ا	pale	n brown.	rod 1	Q	owis!	Wri	rapl
	Orig. Unif. Hab.		Pods lt. tan. Ind. 5 b-p	Pods yellow tan, splashed purple. 5 sd/pod.	7.9	Pod large flat, curved, yellowish, velnated. N.H. 7 b-hr 9 65 52 7 37 wh 8	Purple pods are straight & stringed. Green pods slightly curved Pods deep tan, short, curved, wrinkled, slightly constricted.	N.H. 8 b 9 63 52 8 35 wh	Pods very large, wide almost white, spiral when N.H. 6 b-p 7 55 43 8 38 w 7	Virus tolerant selection. Pods tan, wrinkled,	One pole pl with blue seeds.	1; 5,7	aroy.	ustrl. 8 hr 7 90 53 6 39 w	_	٠,	attr	Oh. 8 hr-p 9 105 48	couch pea. Looks like pease bean. Dark ring sround hilim	R.I. 9 b	Pods tan-pale tan, wrinkled, not constricted.	reddish brown. Wax pod type. R.I. 5 b 8 45 50	Some pl prod yell pods.	6.I.	yell	tan,	hilum and raphe
		Ind.	Pods 14 Ind.	Pods	Austrl. 9 p	Pod N.H.	Pods Pods	N.H.	Pods N.H.	Viru	One	Austrl. 5 b-hr 7 65	Gall	Austrl.	Kerman	Conn. Pease.			Dark		Pods	reddish R.T.	Some pl	12366BS-AB R.I.9	Pods	12300B5C K.1. 9 D 9 02 00 9 37 Wn 6 Pods tan, wrinkled, not constricted. 6 sd/pod	hilw
	P.I.No.	165933	166018		227115 F	267763		267763	304809			343733 1		343735 1	į (	G-19015		G-17265		12366AA		12366BS		66BS-		)CG00	
	P. I	165	166		227	267		267	304			343	,	343	7	7-5		G-1		123		123		123	(	123	

اند. به											
Disease ir.Bact	0 0 11	e d	0	0	0	0	0	0	0	0 6	0 0.
Disease Vir.Bact.	0 0 0 0 hilum &	0 Leck	0	pr 0	0	0	0 ible	0	0 grey	0 Tple	0 0
	red	md pl ov pr 0 0 Seed purple flecked	md pl ov pl ov 0 sd/pod. Seeds	EV 1	201	pr	13	pr		v pur	bī
C01.	v rol	ov trp1	> ₩ ₩	>			ov Susc	md pl ov pr	nd plov pr	WTD.	md plov br flecked tan. md v v v rranberry, &
Seed Shp.	pl ov aphe. pl ov	pl d	pl ov 'pod'	md pl ov lightly	pl ov grey.	vo Lq	grey plo	0 Td		v	md plov flecked to md v ranberry,
Sz.Shp.	md pl o & raphe. md pl o brown a	Ed ]	md ] sd/j	md pl o	md ]	md 1	ked grend pl	md ]	md ]	md v	md present
Shat	∞ +	ਚੰ	2-5		leck		leck ed g		Si	col	
Sh	hill 3 hite	3 1/po	m .	1 lkle	2 5 FJ	-	e fl 6	F- (	rown	3 md v v 0 seed colors brown, purple,	ree ree
+ 0 4	r s&c - 4 brown around hilum r c 3 Seed 2 tone white	8 80	cted	14 1.1 gn r s sc - 1 Pods deep tan-yellow tan, wrinkled,	r s&c 2 md Seeds purple, flecked	f	6-7 sd/pod. Seeds purple flecked grey. 5 1.1 gn r s-c - 6 md pl ov sd/pod. Seeds purple flecked grey. Su	}	s - 5 md pl ov pr Seeds brownish pr. spotted		gn r s - 5 6-8 sd/pod. Seed brown gn r s - 3 types seed purple, red, c
CC	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7	cv	r s&c -	r s&c Seeds pur	Ø	sds p	w (	See	s od.	pur.
Shp. (	s c c ed 2	មិន្និ	cons	K 42	speas	10 H	r seed		0)	g/pc	s s ped l
		frict	r oly cor	r 2110		H	r Seeds	F1 (	3.7 l.l gn $r$ /pod. High ovule.	w w	gn r s 6-8 sd/pod. gn r s types seed pu
Leaves Ligth.Wth. Col.	gn wh +	gn nstı	gn ight	gn n-ye	1.0 gn 7 sd/pod.	gn	/pod/	gn :-1	gn gh	gn 7-	1.1 gn ed. 6-8 1.0 gn 4 types
Leaves .Wth.	12.3 1.1 gn ed 2-tone wh . 10.5 1.1 gn d. 6 sd/pod.	0.1	14.5 1.3 gn inkled, sligh	1.1 gn ep tan-y	1.0 gn sd/po	1.1 gn	e. 6-7 sd/po 13.5 1.1 gn 6-7 sd/pod.	1.2 gn	13.7 1.1 gn sd/pod. High	1.2 gn	L.1
Les h.Wt	33. 5-tc	led	5 led	deel		. ,	6-°	: 1	nie 7	5 rict	od.
Log	12.3 1.1 gn Seed 2-tone wh + 10.5 1.1 gn led. 6 sd/pod.	13 rink	14. cink	14 ods	12.2 ted.	77	1e. 13. 6-7	15	13.7 l. sd/pod.	12.5 onstri	13.0 1.1 nstricted. 15 1.0 sd/pod. 4
to Harv.	~ ~ ~ ~	1, W	1) $\mu_3$ 8 33 wh 9 7 $\mu$ 1 $\mu_*$ 5 1.3 gn r cv - 3 Pods deep tan-yellowish tan, wrinkled, slightly constricted. 6-7		6 ric	74	flecked purple. 6-7 sd/popr 9+ 81 13.5 1.1 gn collapsed. 6-7 sd/pod.	76	78 12 78 12 ed. 8 sd,	69 12.5 1.2 gn r s - wrinkled, constricted. 7-8 sd/pod. 3	76 13.0 1.1 gn & constricted. 6-76 15 1.0 gn 7 sd/pod. 4 typ
	pod.	tan	tan	-19.	76 onstri		ed reapse	α	ed.	6 kled	d 3 % 7 %
Set	88 6 sd/pod. pr 88 pr poorly fi	9 cish	9 rish	9 74 on 9-19.	pr 9+ not co	\$	en flecked pur pl pr 9+ 81 not collapsed.		rict	rin	icte
Flw.		h pink	h 1104	en c	t pu			- 14	h nstr	n;	h wrir t pr nstr
	9 50 w stricted. 6 g snstricted, p	3 w	3 w	34 lt prag to rip	t 1	7 pr	ta thu	face l p	1, not construction 55 9 34 when the state of the state o	y w	53 9 34 wh m. Pods tan, wr 52 9 31 lt & slightly cons
to y.Bl.	rict 5(	3.	33	14 14 14 15 to	rin	2	pal 3 kle	sh 3	no.	2,000 tag	3, te
	onst 9 con	9	deer	aing Yun	n, k	01	tan- 9 wrir	o fi	led,	geeb	Pod Pod 9
nt	54 80 ed,	45	43 des	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	65 ta	148	ds h8	3 t	55 rink	epo ogs	53
Plant to Ht.xWth. Lfy.Bl.	52 kled 54 inkl	36°	40 Fed	55 Be	50 skish	e + 8	60 60 h ts	denda 38	45 n, wr	55	White 70 1k ts 68 sled,
	rrin Krin Krin	tty.	3 ity.	tty.	9 pin	face. 9 27	ity.	Ten	wrr tan	ent.	ot 94 70 fl 9 77 rink
5	R.I. 9 b 9 52 54 9 50 w Pods pale tan, wrinkled, constricted. R.I. 9 b 54 80 9 50 lt 1 Pods tan-pale tan wrinkled, constricted,	rapne. Like a soldier bean.  R.I. 8 b 7 36 45 9 33 wh 9 74 13 1.0 gn f-r c&s - 3  Very early maturity. Pods yellow tan-pinkish tan, wrinkled, constricted. 7-8 sd/pod.	R.I. 8 b 8 40 43 8 33 wh Very early maturity. Pods deep tan-yel	R.I. 8 7 42 55 8 34 1t pr Very early maturity. Beginning to ripen	N.Y. 9 b 8 50 65 6 34 1t pr 9+ 76 12.2 Pods dark tan to pinkish tan, wrinkled, not constricted.	Tendency to fish face. N.Y. 9 b $9+ 48$	Very early maturity. Pods tan-pale tan N.Y. 8 b 9 60 48 9 34 pl Pods deep tan-pinkish tan, wrinkled, not	to anthracnose. Tendency to fish face. R.I. 8 b 6 38 56 7 31 pr	R.I. 9 b 8 45 55 9 34 wh Pods tan to pale tan, wrinkled, not constricted. 8	& flecked grey. R.I. 9 b 9 55 60 8 29 wh Green pod component. Pods deep tan-tan;	& two-tone brown & wnite. S-BB 7 b 9+ 70 53 9 34 wh 76 R. I. Seed brown flk tan. Pods tan, wrinkled, & cc R.I. 8 b 9 68 52 9 31 lt pr Pods pale tan, wrinkled, & slightly constricted. 7
Hab	b b b	b y ma	d y ma	y me	b	y to f 9 b	y me b	chos b	to H	Bre Com	Seed be by Seed be see
nif	pale	8 b sarly n	8 b early me	Barl	9 b	1cy 9	arl 8 leep	Shra 8	an t	oked 9 pod	Se 8 8
ig. U	T. Dds t.	raphe. R.I. Very ea	Brey. R.I. Very e	I. I. II.	N.Y. Pods d	Tenden N.Y.	ry e Y.	ant. I.	I.	flec. I.	SS-BB R. I. R. I. Pods p
Or	R.I. R.I. Pods	Ke Ke	R V e	Ne Ve			Ve N. Po	to to	Fo Po	SB R Gr	SBS- RR-
P.I.No. Orig. Unif. Hab. Vig.	12366CS <sub>1</sub> R.I. 12366E R.I. Pods t.	19	63	69	12684-1	12684-2	Very 12684-37N.Y. Pods	to and 12364DS R.I.	G-12365 R.I. Pods	& flee G-12366B R.I. Green	G-12366BS-BB R. I. 12366A R.I. Pods
L-I	12366C	12367	12368	12369	126	126	126	123	G1	6-1	G-1 123

W

Days

Days

p. 30									
Plant to Flw. to Leaves or or Seed Disease . Ht.xWth. Lfy.Bl. Col. Set. Harv. Lgth.Wth.Col. Shp. C + Shat. Sz.Shp. Col. Vir.Bact.	50 55 8 34 wh 82 13.3 1.1 gn r s&c - 5 md plov w 0 0 1.1 etan, wrinkled & constricted. 6 seed/pod. Seeds white with purple around hilum & along	53 55 9 29 wh 8 69 11.7 1.1 gn r s&c - 3 md v v 0 0 rrinkled, slightly constricted. 7 seed/pod. Poor yield. Seeds 2 colors purple, flk tan, &	62 60 9 34 wh 6 76 13.3 1.2 gn r - 5 md plov wh 0 0 iilum. Pods deep tan. 7 sd/pod. Pods wrinkled & constricted. Seed white purple hilum &	90 55 8 31 wh 9 76 11.3 1.1 gn r s 3 md f1 rct br 0 0 1s are 2 colors tan & white.	12366ES R.I. 7 b-hr 9 65 60 9 34 1t pr 6 82 11.7 1.1 gn r c - 3 md pl rct dk br 0 0 T sd/pod. Dry pods all 1 color - tan. Seeds dark brown, striped & flecked tan. Pods tender, wrinkled, constricted around seeds.	85 70 9 29 pr 9 69 12.5 l.l.gn r cv - 5 m-1g plov bl 0 0 oed purple. 6-7 sd/pod. Seeds black, flecked & striped tan.	9 69 11.5 1.2 gn r c - 5 7 sd/pod. Sds black flecked &striped tan. In ce	ito 50 9 27 pr 6 69 12.5 1.1 gn r c 6 md-1 pl rct bl 0 0 ted & striped purple. 7 sd/pod. Sds black flecked & striped tan. 250 50 8 29 pr 69 12.3 1.1 gn f s + 8 md flow nr 0 0	not constricted. Seeds purple or blue flecked
to Flw.	12366B R.I. 8 b 8 50 55 8 34 wh 82 White seed. Pods pale tan, wrinkled & constricted.	8 b 8 53 55 9 29 wh un-pale tan, wrinkled, slightly cons- ridged brown.	2 60 9 34 wh lum. Pods deep tan.	raphe. 12366DS <sub>1</sub> R.I. 9+ hr 9+ 90 55 8 31 wh 9 6-7 sd/pod. Dry pods are 2 colors tan & white.	12366ES R.I. 7 b-hr 9 65 60 9 34 1t pr 6 7 sd/pod. Dry pods all 1 color - tan. Seeds d constricted around seeds.			12390 N.Y. 7 p 8 250 50 8 29 pr 69 69	

#### PISUA SATIVUM

### 1969 Descriptions and Evaluations

Seeds treated with Arasan 75. Seeded in field 4/28 & 4/30/69. 128 seeds per accession, spacing  $4' \times 11/2' + 4'$ . Notes taken 4/29/68. Fertilizer 640 lb. 10-20-20/A.

l=very variable		l=poor vigor			l=very sparse	l=light									t=tan		l=few or poor set	l=least
													rge	w=wrinkled	gn=green	d=dark		
5= medium	d=dwarf	5=medium		lower.	5=moderate	m=medium		w=white	r=rare	rs.			l=large	M=ML	sp=splash	m-medium	5-medium	5=medium
				and first f			n.		د	in centimete		ripe pods.	m-medium		pr=purple	1=light		
9=most	t=tall	9=very	inches.	between base and first flower.	9=very	d=dark	o first bloom	pr=purple	f=frequent	h and width	per pod.	o harvest of	s=small	s=smooth	r=red	br=brown	9=excellent	9=most
Uniformity	Habit	Vigor	Plant height in	Number of nodes	Leafiness	Color of leaves	Number of days to first bloom.	Flower color	Doubling	Pod size - length and width in centimeters.	Number of seeds per pod.	Number of days to harvest of ripe pods.	Seed size	Seed surface	Seed color		Seed set	Virus general
Μ.	4	5	9	7	ω	0	10	11	12	13	14	75	16	17	18		13	20
Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.		Col.	Col.

		Virus	6-	4			ထု	6								9			9					9	0	ۅ۪	6-	9			6-				p.	3	9
			7	9	4	5	7	Ó	01	C	5	<u>(m</u> )	5	2	4	က်	5	4	4		01	9		<u>.</u>	<del>_</del>	ψ	4	5	0		Ŕ		6		01	(	N
		Set	7	<u></u>	ر د		<u></u>		r 5		N	5	Φ	ω	_	တ	-		N	9		6		တ	_	9	-	-	5		e u		Н		$\sim$		0
		C01	tem gn	d gn	gn sp br			$\Box$	l gn&d br	gn		m gn&t	l-m gn	tem gn	1-m gn	t&m gn	t&m gn	pl gn	m gn	1-m gn	m-d gn	gn sp br		m gn	ct.	gn	pl gn	L-m gn	t&m gn		t&l-m gn		m gn		gn	1	io ds 1
	Seed	Surf	S&W t	S	Ω cm	യ	23	co co	ಭ	rcs w	ω t	S&WI		C. K.				SEW	Ω Ξ	M	Ω Fi	13		W	w	<b>1</b> 3	(0)	w	**		S&W		W		M		<b>→</b>
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ئې		Orig.	Ethio.	Ethio.	Tur.	Tur.	Tur.	Pods ti	Tur.	Tur.	Tur.	Tur.	Neth.	'Cennia	Meth.	'Elwy'	Neth.	'Honey'	'Onyx'	Can.	'Michauxi				H-157	Harris	Lincoln	Н-184	Harris	Harris	H-170	Harris	1
Pea con't.		P.I.No.	331412 I										341888 1		341889 1		341890 1	341891		G-19169			6-12129		J.0+J.T-5	H-168		G-17408 H-184	,	G-19079		G-LYUSU Harris	

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## TREES, SHRUBS, FRUITS and ORNAMENTALS

### 1969 Descriptions and Evaluations

# Kindly submit requests before April 10, 1970.

l=poor l=prostrate l=poor	gr=grey lt=light dk=dark	d=denture t dk=dark r=red	orc=orchid pk=pink l=little ng	l=poor
5-medium 5-medium 5-moderate	pr=purple t=tan r=rugose	e=entire pr=purple lt=light	low pr=purple 5=moderate c=cone ob=oblo an dk=dark	5=medium
9=very 9-erect 9=very ridth in inches.	<pre>cown r=red gn=green of leaf in centimeters. s=smooth</pre>	s=serate ey gn=green bl=blue in rov in full bloom.	lite v=variable 9=much neter in centimeters lobe ov=oval dp=bl=blue gn=gree	pe. 9=excellent
Uniformity: 9=very Habit: 9-erect Vigor: 9=very Plant height and width in inches. Number of branches. m=many	Bark color: br=brown Number of leaves. Length and width of leaf surface:	Leaf margin: Leaf color: gr=grey Date 50% of plants in Flower diameter in c	Flower color: w=wl Amount of bloom: Fruit depth and dian Fruit shape: gl=g- Fruit color r-red	Date when fruit ripe Winter hardiness) Spring recovery)
10v tw	2000	12 12 12 12 12 12 12 12 12 12 12 12 12 1	200	22 23 23
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Fruit Dism.Shape Col.										AO.	or
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						rell		spho			
Flower Diam.Col.	4 6	aves	* *	≯	) کم ا	ouds		пусо		<b> </b>	≯
	<u>د</u> (	rear y le	2 2 2	2.2	6	ny co		and 1		1.7	1.7
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FRUITS polys	chilo s dk	s dk	s ak Sverbea s ak	arıng dk	s dk	epc1	s dk	dk lery		Ħ	ಶ
h.Surf.Marg.Col.B SMALL FRUITS Actinida polygama 5r e dk	Fragaria chiloensis	seedlings, glossy leaves.	- selected for firm fruits. 'Gorham Everbearing' 6 11 25 - r br 7 8.3 7.2 r s dk 7-1	r s dk	מ נ	s ans	9 8.0 7.2 r s dk Best strawberries in field.	s	Fragaria	ß	ທ
Leaf th.Sur SMA Actin	agar	ਰੋ ਂ ! ਂ	Gorha		H	3 r	r berr	to H	Frag	۶۰۱	H
Le A A 4.5	Fr. 5.7	fue 6.0 ruit	7 - 7	orna	6 6.0 4.0	w 1F 5.3	9 8.0 7.2 r Best strawber	dood field resistance to	·	5.5	7.2
Leth 7.0	7.2	6.3 Find to	for firm fruits. ' - r br 7 8.3 7.	ness 'Gorn 6 8.0 7.	6.0	5.8 5.	3.0 st s.	51: 52:		6 7.5 5.	6 8.8 7.
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t.xw	ان بران رب بران	2 - 20	lect	Lect 0 2	4 0	9 J	14 45	o 3		0 5	6 10 55
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ab. V	3 Ver	5 erbe	unts 5	nts 5	4 6 10 45 -	33 25	6 ctio	Se.			
P.I.WO.Orig.Unif.Hab.Vig.Ht.xWth.Br.Color No.Lgth.Wth.Surf.Marg.Col.Blm.  SMALL FRUITS  Actinida polygama  Actinida polygama	G-12352 Neth. 8 3 7 11 35 7 7.2 5.7	N.Y. 4 5 5 7 19 8 6.3 6.0 Gorham Everbearing' Selected for firm fruit	G-12475 N.Y. 6 5 6 11 25 - r br o 0.0	Mother plants - selected for earliness Gornam G-12475 N.Y. 4 5 3 10 21 6 8.0 7.5 Firm fruited selection.	3	Jer. 3 3 4 D. D. Dolan Sel.	264680 Ger. 9 6 9 Early selection.	ier. 6 5 4 10 32 4 8 D. D. Dolan Selection. Good field		9 3	2 3
3. Un:	ch.	r.	ther	Citer I.	0 0	D. I	Jy 9	D. 1		· <u>ˈ</u>	ap. 7
Ori£ Kore	Net	-GG	Mod	M. N. J.	Ger	Ger.	Ger. Ear	Ger.		Jap.	Jap.
.NO.	2352	G-12475 N.Y. 4 'Gorham Ev	2475	2475	264680 Ger. 3	264680 Ger. D. D.	680	264680 Ger. D. D		324182 Jap.	324183 Jap. 7
P.1	6-1	G-1	G-1	G1	264	264	264	564		324	324

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hape	dp gl r				(a)	ſ	<b>L</b> 0						
Fruit Diam.S	ф 9	0											
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	H.8	2.4			2.8	;	H.						
Amt. Blm.	6	7			ω	`	9						
Flower Diam.Col.		Þ			Þ		⊳			ř.	<u>†</u>		
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Mare	Rubus	w		ORI		Or	ಶ	Iris sp.	O		ע	o k	
f Surf.Marg.Co SMALL FRUITS	EI EI	ы		EOU	L Can	ati	<b>G</b>		۶۰	nsat	Ц 1	Iris	
Leaf Ith.Su	8.0	7.0		HERBACEOUS ORNAMENTALS	4.6 r c gr gn 8	Clematis orientalis			1.5	Iris ensata	(•)	1.5	
th.				mi '			5.0 3.0		1.0 1.5		7.7	17	
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Hab	7	cu 3 Lack	e u			ve.	ope ope		ω	`	9	_	
nif.	9 0	root 6 ir b]	ngt		2	acti	20 20		9		<u></u>	∞,	
P.I.No.Orig.Unif.Hab.Vig.Ht.xWth.Br.Color No.Lgth.Wth.Surf.Marg.Col.Blm.	3 Ohi	G-17833 Pa. 6 3 8 44 54 4 gn 6 9.0 Ponzer blackberry. St. Mary's, Pa.	69-29 N.Y. Wellington Black Late		G-17329 N.Y. 7	Attractive.	G-17847 Iowa 5 4 9 42 7 Seeds globe and silky.		200315 Korea		316053 Jap.	316648 Korea	
0.01	80-6	333	10		329		748		15 K		53	184	
N.H.	-131	-178	59-29		3-17		3-17		2003	,	3160	3166	)
P-1		, 6											

Date AH SR			6 6		6 6	8-8 8 9	8-10 7 9	8		4 3-6		6 6	6 6	6 6		1 1-2	3 0-2
. Depth Diam Shape Col.						1.3 1.0 81	1.3 1.0 gl										
Flower Amt. Dism.Col. Blm.		at l				e dk 7-5		m end.									
		rpures				.5 h]ose	01.	ossotq									
P.I.No.Orig.Unif.Hab.Vig.Ht.xWth.Br.Color No.Lgth.Wth.Surf.Marg.Col.Blm.	WOODY ORNAMENTALS (shrubs)	thunbergi atropurpurea	pr	eana	dk	dk 7-5	dk 7-10	3 horns on blossom end e m gn	sempervirens	dk	suffruticosa	dk	bl gn	dk	ſ	šp.	dk
.Marg	ORNAM	bergi	ψ į	Buxus koreana	Φ				emper	a	uffru	O	ψ	ø	District	מ.	Φ
Leaf Tth.Surf	WOODY (S		3 sm	Buxı	l sm	1 sm	l sm	globe,	Buxus	l sm	Buxus	l sm	o sm	ms 0	ģ	1 Sm	o sm
rth.Wt		Berberis	2.4 1.		1.5 1.	1.8 1.	1.7 1.	1.6 1.	ДΙ	ri.	MΙ	1.8 1.	1.9 1.0	1.7 1.0		1.9 1.	2.0 1.0
No. Le		ă۱	9		9		•			5 2.3		5 1.	6 1.	7 1.		6 1.	4 2.
No.Bark Br.Color			, S ct		67	gr-gn 8	gr	Killed back I" 22 m br 8		gr		<b>21</b>	10 gr	gr-t		t)	10 gn-t
No.			S-9 5 6 4 5 6 m t Nana' Reddish purple leaves.		14 m	14 m	15 m	lled 2 m		12		10 11		Ħ		9	11 10
It. xW			5 6 irple		11 1					9 17 9		10 1	6 6	12 11		.3 12	4
Vig.			sh pr		ω	8 10	ω	rming 9		6		4	4	7		9	3 14 Patio
Hab			6 Reddi		7 5 Sheridan	7 6 8 10	7	Some terminals 8 6 9 16 11e, N.Y.		2 9		7 4	200	6 77.		<u> </u>	6 Left
Unif			5					Y.				4	Can. 6 6	can. 6 6 hybrid #77.		N.Y. 7 7	N.Y. 4 6 3 1. Roberts Left Patio
Orig			S S-9		7 Can.					N.Y.		Can. l	Can	Can.		N.Y.	N.Y. Robe
.I.No.			G-17786 S-9 5 6 4 5 Nana' Reddish purp.		G-17877	G-17878	G-17879	G-18177	ţ.	255075 N.Y.		G-17880 Can. 4	G-17881 Can. 6	G-17882 Can. 6 hybrid #7		G-18999 N.Y. 7 7 6 13	G-19000 N.Y. Rober
HI			0		9	0	G	9	•	CA		9	G	0		O	Ü

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Date Ripe WH SR	6 3-5	4 3-6	3 1-4				6 6		9-16 1 1		ř t		1 1		8		5 2-4	. 49
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Fruit Depth Diam.Shape Col.							H 50		Opl									
Fruit Diam.S							1.2		1.0									
Septh					47		H		0.4									
Amt. Blm.							1-1		2									
									pk									
Flower Diam. Col.									0.3							ntea		
				ದೆ		lora			42-9	ω		ಪ		11.8		argentea		
.Col.	sp.	dk	dk	Cotoneaster lucida	Tage of the same o	Cotoneaster racemiflora	dik	cornea	dk	paucinervis	dk d	conferta	日	Juniperus horizontalis	gr-gn	is V	lt gn	
.Mare	Buxus s	Φ	Φ.	aster	O	ser re	Φ		٥		Φ			hori		horizontalis		
af 1.Surf	3 Sm	l sm	recover	otone	<b>F</b> į	oneast	ms (	Erica	Sm	Cornus	1.2 sm	Juniperus		perus		horiz		
No.Lgth.Wth.Surf.Marg.Col.Blm.	r-i	7.1	spring recovery 1.8 1.1 m	ŭ	7 2	Coto	5 3.0		0.5			5		Jun		Juniperus		
No. Lg	5 2.3				8 7.2		9 5.5	,	16 1.0		4 4.5		N		_	Juni	_	
	<b>11</b>	gr-rn 8	Very good gn 4		br		pr		br gn 16		gn-pr 4		br		r-br		r-br	
No.Bark Br. Colo		• 00	9						7 b		<b>9</b>		2-8				m r	
.xWth	12	20 8	1gnt. 23 6		18 6		26 m		4	1	18		14		20 m		21	
ig.Ht	7 14 12 7	6 4 7 11 20 8	evel rig 7 11		8 19		9 37		2 9		6 14		3 5		7 5		2 9	
Hab.V	10	; ; ;	th te		- e		9	,	9		9		m		0.		$\sim$	
Unif.	ر ا	N.Y. 6	cs 4 5 Pati		SSR 9 Attractive		<u></u>		77	t	<u></u>		2		Pa. 7 Wiltonii		<b>ω</b>	
Orig.	N. K.	N.Y.	N.Y. Left		USSR		USSR		N.Y.		USA		Ра		Pa.		- ದಿ	
No. Bark P. I. No. Orig. Unif. Hab. Vig. Ht. xWth. Br. Color	44-79	67-45	911-19		313962 USSR Att		313964 USSR		2-89	1	294095 USA		G-14139 Pa.		G-14138 Pa.		G-14137 Pa. 8	
<u>L</u>	19	19	19		31		31	,	9	(	50		D		9		5	

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Date Ripe WH	9	0	9-25 9	9		rv	σ	0
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Fruit am.Sh			ਯ					
Fruit Depth Diam.Shape			0 0					
			0.3					
Amt. Blm.	<u>,</u> ∞		6					
Flower Diam. Col.	orc		Mo-W			<b>•</b>	ui	
	1.3		1.6			nides	ohyllı	
Date 1.Blm.	dica 9-15		cuspidatum compactum sm d dk 6-3 1.			v. juniperoides gr rn , next 3" purple.	dilitatum x V. lobophyllum 0 r s m	8
00 - 80 - CO	Lagerstroemia indica 4.4 sm e dk 9- 3.0 sm e dk	dk	atum dk	us dk	S E	v. junij gr rn next	× V.	Viburnum lantana r e d
rf Ma	n e e	Lonicera	uspida n d	Prunus n e	Rosa	alis	tatum	cnum ]
Leaf th.Su	Lagerst. 4.4 sm 3.0 sm	.7		3.2 sm	.l m ldew.	rient		
Leaf Date No. Lgth.Wth.Surf Marg.Col.Blm.	4.0.4 1.0 3	2.5	Polygonum 7.0 8.5	5.8	.3 2 ry mi	Thuja orientalis needles orthwest exposur	Viburnum 7.5 6	10.07
	7 8 4 8	<b>6</b>	41 -		39 5-10 gn-br 6 5.3 sceptible to powdery	7 n	F	, ī
Bark	r-br	12 24 m gr honeysuckle H-52	٤	br-gr 3	gn-b e to	lt br 7 mage on r	gnòr	4
No. h. Br.	12	24 m	50 m	5	5-10 ptibl	m d dam		8
t.xWt	24 23 16 24	12 24 honeys		24 5	4 39 susce	8 17 14 m back, wind	8 25 6	17 14
Vig.H	7 2 7 8 1	8 1 dwarf h	9 30 frost	7 5	9 34 39 5-10 gn-br 6 5.3 2.1 m very susceptible to powdery mildew.	8 1 back	7 18	7 1
Hab	6a-7	. 11 /		4	ver,	8 illed	ω	<u></u>
Unif	USA 5 7 Conestoga' USA 6 5 'P' Powhatan'	Iowa 9 'Clavey's'	N.Y. 7 4 Blooms until	R 27	witz. 6 5 Fast grower,	Thuja orientalis vale. 9 8 8 17 14 m 1t br 7 needles Top 6" killed back, wind damage on northwest exposure,	Md. 6	Md. 6
.Orig	USA CO USA	4 Iow	3 N.Y Blo	y USS.	Swit	Pa. Top		Md.
No. Bark P.I.No.Orig.Unif.Hab.Vig.Ht.xWth.Br.Color	316672 USA 'Co 316674 USA	G-17784 Iowa	G-18343 N.Y. Bloom	G-18174 USSR	234824 Switz. Fast E	244657 Pa. Tor	316676	316679

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N

325156 Md. 5 7 7 38 6 1-4 br 6 6 'Fuji' Grafted on McIntosh 2-27-69.

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Flower Amt. Fruit Diam.Col. Blm. Depth Diam.Shape Col.				ana								
				lantana								
Date 01.Blm.	ntii		ldii	× u	TALS	dk gn&r	ctive. dk r-gn	dk r-gn	dk r-gn			dii
Leaf Date No.Lgth.Wth.Surf.Marg.Col.Blm.	sargentii e dk	e G	Viburnum sieboldii	Viburnum rhytidophyllum x V.	WOODY ORNAMENTALS (trees) Malus Minn	e dk	Attractive.	e dk	e dk	s dk		Malus sieboldii
Jurf.	Viburnum .5 r	H	urnum	r	DY OF (t)	H		٤	H	٤		lus s
Leaf Wth.Su	0		Vibi	m rhy	WOO	3.6 r	plant.	4.5 r	4.0	2		Me
Lgth	9.5	11.0 6.0	14.0 6.0	Viburn 7 15				$\infty$	5.0	8		
IN K	. 4	77	7	> -	Φ	_	ori,	ve.	4	70		
No. Bark Br. Color	br	br	br	br	8 53 9 1-3 r-br	br	from	acti	br	br		
No.		m	m		1-3	tive 1-4	cted 1-3	Standard 60. Att: 7 8 50 14 1	Н	1-3	36	
xWtl	4 10 16 2	12 6 3	19 23	7 19 20 3	0	rac	) 16	50.	22 6 1	9	oliag	
H.	10	12		19	53	Att 43	55 55	50	22	43	in f	
.Vie	CH CH	m	72	-	0	-26	sec 9	anda 8	-106	100	gree	
Hab	USA 5 5 1 Susquehanna 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		<u>-</u>	th tr	<u>-</u>	0 回 0	age ,	n St	O M	Z C	1	
hif	7	luen 4 Idag	6	5 gha	ω	6d 01	ilo]	9 o	\$ 0 0	6 O	ing	
No. Bark P.I.No. Orig. Unif. Hab. Vig. Ht. xWth. Br. Color	USA 5 5	USA 4	USA 6	316675 USA 5 4	G-17845 N.Y. 8	G-17845 Iowa 6 8 9 43 12 1-4 br 7 5	Red 1	G-17845 Iowa 9 7 8 50 14 1 br 6	G-17845 Iowa 9 6 3 2	G-17845 Iowa 6 7 6 43 6 1-3 br	Seedlings - green foliage.	
No.0				n 52	845	548	845	845	845	548		
P. I.	316681	316680	316682	3166	G-17	G-17	G-17	G-17	G-17	G-17		

Date Ripe WH SR

0	
Ripe WH	
Depth Diam. Shape Col.	
Blm.	
Diam.Col.	
Blm.	
P. I. No. Orig. Unif. Hab. Vig. Ht. xWth. Br. Color No. Lgth. Wth. Surf. Marg. Col.	Consider the second of the sec
	.xWth.

Ulmus pumila arborea dk dk 5.5 10.7 6.0 10 0 gr gr 8.5 m 297426 USSR 5 6 9 12' Some tip killing. 297427 USSR 5 6 8 11'



